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ABSTRACT

This report reviews the dissemination of information on educational programs and information services through a combined literature synthesis focusing on the total dissemination context, configurations, and capacity of major agencies and networks of agencies in the United States. Relevant literature is reviewed as it relates to national and state dissemination programs; schools, colleges, and departments of education; teacher centers; the Teacher Corps' dissemination system; intermediate service agencies; associations and nonprofit organizations; the National Network for Vocational Education; the Bureau of Education for the Handicapped; and general assistance centers. Each unit is described in an introduction to the relevant literature. (RAO)

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STATEWIDE EDUCATIONAL DISSEMINATION CAPACITY:

A REVIEW OF RECENT LITERATURE AND CURRENT INFORMATION

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July 1978

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PREFACE

The Scope of Work of the Far West Laboratory's Educational Dissemination System Support Program for the grant period December 1977 through May 1978 contained several related tasks that addressed collecting, organizing, and synthesizing information related to educational linking agents and the analysis of educational extension system options. The general approach to each of these several tasks employed a "participatory" model which called for the active involvement of sponsors, scholars, and key dissemination performers.

Following preliminary discussions with DRG staff and several outside consultants, it became apparent to Far West Laboratory staff that several of the proposed tasks could be more closely articulated in a combined literature synthesis effort that would focus on the total dissemination context, configurations, and capacity (current and potential) of major agencies and networks of agencies.

This paper summarizes collected key sources that were reviewed during the grant period. The intent of the paper is to provide a general overview of the range, content, and character of current published and unpublished information concerning the agencies, programs, and networks that were considered. The review of literature focused primarily on nationwide surveys or studies of various types of educational agencies (e.g., USOE Regional Offices, state education agencies, intermediate units, colleges of education, information services). A deliberate effort was made to extract from these surveys and studies the most pertinent information bearing on educational dissemination and knowledge utilization.

In areas where we could find no recent, comprehensive descriptions of dissemination activities, special studies were commissioned to organize available information (e.g., teacher centers, educational associations, the vocational education dissemination network). By combining the results of the literature review and the special studies, we have attempted to combine, in one place, a general overview of the types of agencies and networks of agencies that are significant parts of the educational dissemination enterprise in the United States.

The reader should note that this is an ongoing effort. Significant types of agencies (e.g., local education agencies) and interorganizational arrangements are missing. Although it is not comprehensive in coverage, the report may yet provide a useful source of information.

I. INTRODUCTION

Currently there is a significant and growing interest in educational dissemination as a two-way communication process that can, on the one hand, assist educational practitioners who seek to improve their schools and the process of education and, on the other hand, assist the educational R&D community in the conduct and delivery to practitioners of more effective, pertinent, and timely knowledge, products, and programs.

The Interstate Project on Dissemination (IPOD, 1976) observed that federal and state dissemination activity, although excessively fragmented by the existence of numerous isolated legislative and programmatic thrusts, had progressed to a point where state education agencies should recognize dissemination as a major function and move toward development of a coordinated, integrated system within each agency. Moreover, to help overcome isolation and fragmentation, the IPOD study also recommended that a plan for a nationwide system for sharing educational knowledge be developed and implemented. This perspective was widened somewhat by the Dissemination Analysis Group (DAG), a combined group of government and non-government specialists who obtained input and comment from interested parties throughout the country. The DAG report (1977) takes a national perspective on dissemination, identifies operational and systemic problems, and then examines federal dissemination activities to see whether they contribute to problem resolution. Although the DAG found that, on a program-by-program basis, federal activities were sensible approaches, few existing federal dissemination activities encourage the kinds of combinations of existing networks and capabilities needed to improve educational dissemination in a major way. To create an interrelated nationwide system for educational dissemination, the DAG report outlined several action steps, including the development of a shared, nationwide vision of a comprehensive educational dissemination system, the collection of descriptive data, and the establishment of planning and administrative mechanisms at the federal, national, regional, state, and substate levels. In June 1977, the first Dissemination Forum was convened with voluntary representation of a number of federally-funded programs (e.g., ERIC, NDN, R&D Utilization, R&D Exchange, State Dissemination Capacity Building, National Dissemination Leadership). The Forum participants endorsed a "credo" which may be considered a precursor for the nationwide vision of a comprehensive educational dissemination system of the kind anticipated by IPOD and DAG.

At this time there are imminent national policy deliberations concerning the creation of a Department of Education and concerning the roles that NIE and USOE might play in fostering the scope and direction of a larger and more coherent nationwide dissemination arrangement than the one that currently exists.

At USOE there are several considerations (e.g., how to strengthen dissemination and school improvement aspects of a new Elementary and Secondary Education Act; defining and developing a dissemination role in the retrenched Regional Offices). At NIE, perhaps the most immediate challenge is how should the new Regional Program of the Program for Dissemination and for Improvement of Practice assist people representing diverse educational perspectives and resources in regions of the country to develop their own programs for generating and disseminating knowledge. The Regional Program "seeks to establish ongoing institutional relationships within and among the states, local school districts, colleges and universities, and other educational organizations in regions of the country so that channels of communication and cooperation are established and more coherent use is made of resources within the region." (NIE, The NIE Mission and NIE Program Activity, 1978, p. 66.) To accomplish this objective, it may be useful to have a more comprehensive view of the current and potential capability of the various types of agencies.

During the past decade there have been a number of studies and surveys that bear on the current status and the potential capacity of various actors and organizations to accomplish educational dissemination and improvement-oriented change support in the field of education. One of the current data-gathering efforts is being performed by the Research and Development Exchange (RDx) as part of its periodic updating of the RDx Baseline Study. The RDx Baseline, which now covers 33 states, includes information on dissemination activities and dissemination needs of USOE Regional Offices, State Educational Agencies, Intermediate Service Agencies, and other educational agencies or programs with significant dissemination interests.

However, the RDx update of the Baseline is not the only ongoing effort to assess educational dissemination capacity, potential, and need in the various regions and states of the United States. This is also an important aspect of the ongoing National Testing Service evaluation of the State Capacity Building Program. In addition, several recently completed studies provide rich sources of data regarding special aspects of nationwide dissemination systems. These include: Knowledge Production and Utilization Activities of Schools, Colleges, and Departments of Education (Clark and Guba, 1976, 1977; Lotto and Clark, 1978), the Evaluation of the National Diffusion Network (Emrick, Peterson, and Agarwala-Rogers, 1977), Communication for Change in Education: Educational Linkage Programs in the 1970s (Butler-Paisley and Paisley, 1975), the Survey of Education Information Service Agencies (Katter and Hull, 1976), and Assistance Strategies of Six Groups that Facilitate

Educational Change at the School/Community Level (Center for New Schools, 1977).

Educational user need and utilization information is also available from several current sources, e.g., Federal Programs Supporting Educational Change (Berman, McLaughlin, and various other authors of eight volumes, 1974-1977), The Educational Information Market Study (Hood and Blackwell, 1976; Hood, Mick, and Katter, 1976). Significant ongoing utilization studies include the AIR study of the diffusion and implementation of PIP programs and the study of the R&D Utilization Program (Far West Laboratory, Abt Associates, Inc., and the seven R&DU Contractors).

Currently there are several efforts to synthesize the information contained in these and other relevant dissemination studies in order to derive policy, management, and research and evaluation implications (see, for example, A Synthesis of Findings Across Five Recent Studies of Educational Dissemination and Change, Emrick and Peterson, 1977, 1978; see also the Inter-Program Study of the Abt proposal to conduct A Study of the R&D Utilization Program, 1977). These efforts promise to provide highly useful syntheses of the findings of key dissemination studies. However, there is an immediate need to accomplish a more focused effort that would inform the NIE regarding capacities and options that may exist and to inform the R&D Exchange regarding specific national, regional, and state educational dissemination planning opportunities.

To meet these needs, a continuing activity was proposed that consists of several coordinated efforts including:

1. Identification of major issues, questions, and data needs relating to educational extension agent and related dissemination concerns as perceived by federal, state, and other policy and program management audiences.

2. Analysis and synthesis of key documents, data, and studies pertaining to the above.

3. Collection of existing and new data, as required, with special focus on filling gaps or providing more reliable estimates with respect to:

    - inter-organizational configurations and contexts
    - statewide capacity
    - organizational capacity
    - personnel resources and capabilities
    - cost/effectiveness of critical linking functions.

4. In-depth analysis of the information developed in 1, 2, and 3 above by policy and program analysts to derive implications, develop options, and project alternative scenarios for the establishment of education extension initiatives.

5. Communication of results through individual and small-group meetings with key persons and through larger conferences, published reports, and journal articles to reach a larger group of interested stakeholders.

This report summarizes the contents of a number of key documents and studies that have been collected as part of the third effort.

II. SUMMARY OF RECENT STUDIES OF EDUCATIONAL DISSEMINATION AND UTILIZATION CAPACITY

Federal dissemination activities in the field of education have grown steadily over the past two decades. Under USOE sponsorship, networks have been established to foster dissemination of USOE-sponsored exemplary programs in elementary and secondary general education and in compensatory, vocational, and special education. NIE-sponsored programs are exploring and assessing the potential of or are aiding in building the dissemination capacity of various organizations, including state, intermediate, and local education agencies, schools and colleges of education, R&D centers, regional laboratories, teachers' centers, and professional associations.

Although much is known descriptively about educational dissemination and change support programs and outcomes, our information is fragmentary. In this section we shall review selected findings of recent studies.

A. The National Perspective

Perhaps the first attempt at a comprehensive treatment of educational dissemination at the federal level was Educational Research and Development in the United States (Gideonse, 1969). This study provided an historical overview and included specific treatments of R&D sponsors, performers, management, financial and manpower resources, substantive content, and policy implications. Among other findings, this study provided evidence that during the several years prior to 1969, USOE support for dissemination had averaged approximately ten percent of the total USOE R&D funding, but that the average for all major federal, foundation, and other sponsorship was less than seven percent. At that time, dissemination was a topic of specific interest, but only in terms of subheadings within chapters (e.g., research functions supported, utilization of R&D in the public schools, and the change process [as a policy perspective]).

Seven years later, NIE provided an "update" titled The Status of Educational Research and Development in the United States: 1976 Databook (Paisley, Butler-Paisley, and Shapiro, 1976). By this time, dissemination rated two chapters (Dissemination of Educational R&D Products and Information, and Utilization of R&D Products and Information). The 1976 Databook provides information on R&D journals, R&D conventions, federal network activities, programs in the state departments of education (dollar expenditures and brief descriptions of fifteen State Dissemination Capacity Building projects) and "other programs." Perhaps one of the most interesting tables in the 1976 Databook is a count of linkage facilities and programs for each of the fifty states and the District of Columbia. Included in the tables are the state-by-state distribution of: 146 general education information centers, 53 special education information centers (primarily vocational and handicapped), 208 teacher centers, 70 school study councils, 339 education libraries of teacher training institutions, 16 ERIC clearinghouses, 8 regional laboratories, and 13 R&D centers (see Table 1, p. 10). The Databook notes (p. 63):

> Distribution of linkage facilities and programs by state largely parallels the size of each state's instructional staff (the primary clientele). Thus Alaska and Wyoming, with the smallest instructional staffs, have the fewest linkage facilities and programs. California and New York, with the largest instructional staffs, have the most. New York's total of 84 facilities and programs, however, is

> greater than its instructional staff would indicate. California, with a larger instructional staff, has a total of 59 facilities and programs. Regional concentrations of facilities and programs, such as school study councils in the Great Lakes area and teacher centers in New England, can also be seen in Table [1].

Linkage Programs

While the Databook provides a brief overview, we can turn to several other studies for details about specific types of dissemination programs and agencies. Information about the variety of linkage programs is provided by a recent general survey of linkage services (Matilda Butler and William Paisley, 1975).

This project began with the development of a taxonomy along six dimensions: (1) level of sponsorship of services; (2) institutional base or setting; (3) services provided; (4) focus of services; (5) interfaces with clients; and (6) source of initiative for undertaking services. This taxonomy was the basis for classifying more than forty linkage models. A simpler taxonomy then evolved that was closer to the terminology that linkage programs apply to themselves. The refined Butler-Paisley taxonomy, with one linkage program as a specific example of each type, is presented in Table 2 (see pp. 11-12).

TABLE 1

LINKAGE FACILITIES AND PROGRAMS BY STATE RELATIVE TO INSTRUCTIONAL STAFF IN ELEMENTARY AND SECONDARY EDUCATION: SELECTED YEARS

State	Staff	GIC	SIC	TC	SSC	EL	EC	RL	RDC
Total	2,308,000	146	53	208	70	339	16	8	13
Alabama	36,000		2		1	7			
Alaska	4,000	1				1			
Arizona	22,000	1	1		2	2			
Arkansas	21,000				1	6			
California	213,000	13	2	9	2	25	2	2	4
Colorado	27,000	3	2	8	1	6	1		1
Connecticut	39,000	1		9	1	5			
Delaware	7,000			1	1	1			
District of Columbia	8,000	4	3	7	1	4	2		
Florida	72,000	4	1	4	2	8			
Georgia	46,000	3		8		9			
Hawaii	9,000					1			
Idaho	8,000	1		3	1	2			
Illinois	127,000	4	1	5	4	15	3		
Indiana	57,000	4			6	6			
Iowa	36,000	8				9			
Kansas	27,000	2	1	1		7			
Kentucky	34,000	1	3	2		6			
Lousiana	47,000					13			
Maine	13,000	2		1		3			
Maryland	47,000	3		4	1	3			1
Massachusetts	69,000	7	2	12	2	9			
Michigan	100,000	6	1	7	2	9	1		
Minnesota	49,000	2	1	4	6	10			
Mississippi	26,000		1	1		5			
Missouri	50,000		1	2	1	11		2	
Montana	9,000	1				2			
Nebraska	19,000	3	2	2		8			
Nevada	6,000	1		2		2			
New Hampshire	10,000		1	3		1			
New Jersey	90,000	2	1	3	4	14	1		
New Mexico	13,000		2	3	1	5	1		
New York	208,000	15	3	19	14	31	1		1
North Carolina	51,000	3	2	4		14			1
North Dakota	8,000	3		6	1	1			
Ohio	115,000	9		11	3	22	1		1
Oklahoma	28,000		1	1	1	8			
Oregon	23,000	3	1	4	1	5	1	1	1
Pennsylvania	128,000	8	3	7	4	28		1	1
Rhode Island	11,000	1		1		3			
South Carolina	29,000		1			6			
South Dakota	9,000	1		5		4			
Tennessee	38,000	1	3	1	1	13			
Texas	133,000	11	2	21	1	18		1	1
Utah	12,000	3	3	3		3			
Vermont	7,000			5		1			
Virginia	53,000	5			1	6	2		
Washington	35,000		1	4	1	8			
West Virginia	18,000	3	1	9		3		1	
Wisconsin	56,000	3	2	6	1	12			1
Wyoming	5,000		1		1	1			

KEY TO ABBREVIATIONS

Staff – Instructional staff in elementary and secondary education, 1972. NCES, *Digest of Educational Statistics: 1973 Edition* (Washington: Government Printing Office, 1974).

GIC – General educational information centers. J. Wanger, *Directory of Educational Information Resources* (New York: CCM Information Corp., 1971).

SIC – Special educational information centers (chiefly on vocational education and education of the handicapped). Wanger, *Directory of Educational Information Resources.*

TC – Teacher centers. Syracuse University Teacher Center Project.

SSC – School study councils. National School Development Council.

EL – Education libraries of teacher-training institutions. *College Blue Book, 1969-1970* (New York: CCM Information Corp., 1969).

EC – ERIC clearinghouses. NIE.

RL – Regional laboratories. NIE.

RDC – Research and development centers, educational policy research centers, both NIE.

TABLE 2

A TAXONOMY OF LINKAGE PROGRAMS

(Butler and Paisley, 1975)

1. INFORMATION PROGRAMS AND CENTERS

   - Federal, General Subject Matter (Educational Resources Information Center--ERIC)
   - Federal, Focused Subject Matter (Special Education Instructional Materials Network--SEIMC/RMC)
   - State, General Subject Matter (Project Communicate, Kansas State Department of Education)
   - State, Focused Subject Matter (Research Coordinating Unit, Tennessee State Department of Education)
   - Regional, General Subject Matter (Research Information Services for Education, Pennsylvania)
   - Proprietary Information Project, Focused Subject Matter (XEROX Curriculum Clearinghouse)

2. TEACHER CENTERS

   - State Consortium (Texas Teacher Center Project)
   - Regional Consortium (Bay Area Learning Centers, California)
   - University-based Individual Center (Workshop Center for Open Education, City College, New York)
   - Independent Center (Advisory and Learning Exchange, Washington)
   - Residential Center (Teacher Center, Academy of the Sacred Heart, Greenwich, Connecticut)

3. TECHNICAL ASSISTANCE PROGRAMS

   - Technical Assistance for Planning (Educational Planning Specialists of New Jersey Model Cities Program)
   - Consortium for Multi-product Implementation (Northwest Laboratory/Far West Laboratory/Central Midwestern Laboratory/Wisconsin R&D Center Consortium)
   - Consortium for Single-product Implementation (Research for Better Schools/Pittsburgh R&D Center IPI Consortium)
   - Single-program, Single-product Implementation (Indiana Social Studies Development Center)

4. PROFESSIONAL ASSOCIATION PROGRAMS

   - Retrieval Services (School Research Information Service, Phi Delta Kappa)
   - Information Collection and Synthesis (Educational Research Service, independent but co-sponsored by five professional associations)
   - Multi-faceted Information Program (American Educational Research Association)

5. SCHOOL STUDY COUNCILS

- Emphasis on Staff Development (Network of Innovative Schools, Massachusetts)
- Emphasis on New Project Development (Educational Research and Development Council of the Twin Cities Metropolitan Area, Minnesota)

6. BROADCASTING FOR EDUCATORS

- Information Services (KETS-ETV, Arkansas)
- Brief Workshops (KET-ETV, Kentucky)
- Longer Courses (WHA-ETN-SCA, Wisconsin)

7. PUBLISHING FOR EDUCATORS

- Professional Books (Education Division, University of Chicago Press)
- Professional Magazines (Learning Magazine)

8. COLLEGE AND UNIVERSITY EDUCATION LIBRARIES

- Emphasis on Search Services for Educators in Field (University of Indiana Education Library)

9. INSERVICE TRAINING

- College-based (California State University at San Jose)
- District-based (San Francisco Public Schools)

10. MISCELLANEOUS LINKAGE PROGRAMS

- District-based Instructional Materials Center (Instructional Materials Center, Sunnyvale, California)
- Evaluated Product Information (Educational Products Information Exchange, New York)
- Proprietary Consulting and Research Services (Westinghouse Learning Corporation, New York)
- State Education Agency Consulting Services (Consultants, Utah State Department of Education)
- School Research Office (Dade County, Florida)

Explication of linkage services and linkage costs followed in a second phase of the project. Linkage services are grouped in four primary categories: retrieval, publication, media, and human (interpersonal). The 24 specific services within the four categories are also aggregative; that is, a linkage program is likely to have provided several varieties or at least replications of each specific service.

The service categories are:

Retrieval Services

1. General (prepackaged) bibliographies or lists
2. Individualized bibliographies or lists
3. General (prepackaged) compilations of abstracts
4. Individualized compilations of abstracts
5. General (prepackaged) selections of documents
6. Individualized selections of documents

Publication Services

7. Brochures describing services
8. Newsletters, bulletins, or other serial publications providing educational news and brief notes
9. Magazines, journals, or other serial publications providing substantial reports of research and practice
10. Papers (research reports, case studies, reviews, etc.) shorter than monograph length
11. Monographs or books
12. Instructional materials (published materials for classroom use)

Media Services

13. Films, slides, tapes, etc., for inservice training
14. Teleconferences or telephone classes for inservice training
15. Radio broadcasts for educators (new or inservice training)
16. Television broadcasts for educators (new or inservice training)
17. Instructional materials (films, slides, tapes, etc., for classroom use)

Human Services

18. Correspondence answering questions, providing guidance, referral, etc.
19. In-person question-answering, guidance, referral, etc.
20. Demonstrations of practices, skills, devices
21. Presentations at conventions or conferences
22. Classes, workshops, seminars
23. Group consultations or technical assistance
24. Individual consultations or technical assistance.

Linkage cost analyses focused on the attribution of direct and indirect costs of labor, materials, etc., to each service. Twenty-six diverse linkage programs were then site-visited to determine the feasibility of service/cost measurement. With a few exceptions, it was found that the recording systems of the visited programs could not be disaggregated into service/cost data at the level of individual services (e.g., technical assistance consultations). However, the linkage programs provided useful information about the categories of services and costs that would be compatible with future disaggregations of their records. One especially pertinent finding was:

> "...the quality of service records is highly correlated with kinds of services provided. Programs that emphasize retrieval and publication services deserve no special credit for their extensive files on numbers of publication units sent out, although any retrieval or publication program lacking such data would be remiss. At the other end of the service continuum, programs that emphasize informal interpersonal contacts (e.g., between the staff of a teacher center and its drop-in clientele) can be forgiven their deficient files; it can be argued that record-keeping upsets rapport between staff and clientele." (p. 4.4)

The authors further noted that programs maintain complete or incomplete records according to each director's sense of importance of such records. Directors with educational research or information science background accept the need for cost-efficiency data, whereas directors with clinical or humanistic backgrounds tend to be skeptical of quantitative approaches and tend to evaluate their operations on the basis of encounters with individual clients.

In a third phase of the study, linkage client outcomes were studied by means of a mail survey of clients of 11 linkage programs. The survey produced 1,294 usable responses (29% return rate). In general, the reported use of most linkage services was slight, but systematic relationships were formed between kinds of services used and kinds of outcomes reported.

Among the several conclusions and recommendations of the Butler and Paisley study we especially note the following:

> (1) Despite what appears to be an ample literature on educational change...little is known about the process by which different linkage services affect different tasks of teachers, adminstrators and others...
>
> Educational linkage is a system for sharing facts, ideas, values and skills related to educational work. Educational work is shaped by political, economic, and social forces that are more powerful in the short term than facts, ideas, values and skills. The interplay of these forces in settings where linkage services are provided needs to be understood before the impact of linkage services can be evaluated.
>
> There is no parametric "truth" about the role of linkage in educational change. *A sampling of case studies of linkage services in the context of political, economic and social forces will equal or exceed the validity of a national survey that gathers superficial facts about linkage*. [Emphasis added.]
>
> (2) Our visits to linkage programs persuaded us that each form of linkage is being practiced successfully in some programs while it is being reinvented elsewhere. Linkage programs arose in different educational service traditions; linkage personnel have no common meeting ground--no professional associations, no journal, no summer workshops...
>
> Linkage personnel who are in the "sharing business" have less opportunity to share their successes and failures with each other than teachers, counselors, administrators, R&D personnel, or any other group in education.
>
> With inter-government sponsorship if necessary, a network or association of linkage personnel should be created. The minimal sponsorship costs will be offset by gains in linkage effectiveness and, further down the road, by resource sharing among programs.
>
> (3) There are a few visible efforts to move educational linkages up to its next technological plateau. The importance of computer information retrieval is warmly acknowledged by linkage staffs and client, but the next generation of technological aids seems to be stranded

> on the drawing boards...If a service can be improved markedly by use of telecommunication, audiovisual, or computer aids, then evaluation of the pre-technological form may be wasted effort.
>
> (4) However, because some monitoring of linkage programs is necessary for policy planning, we recommend the use of the evaluation design developed in this project. (Butler and Paisley, 1975, [pp. 5.3 - 5.5].)

Information Services

In a related study, to which Butler and Paisley contributed, the System Development Corporation undertook an intensive field survey of 53 information service sites throughout the United States. (Katter and Hull, 1976). For the purposes of this study an Education Information Service (EIS) was defined as an administratively isolable unit consisting of an education information collection(s) with a conduit or means of outside access. To guide sampling, representative services were selected along two primary dimensions: main orientation (audience-oriented; service-oriented, collection-oriented; product-oriented) and service-area (national, state, regional, or local). Managers, and sometimes other staff, were interviewed at their sites in sessions ranging in length from 2½ to 8 hours, and averaging 3 hours. The interview instrument consisted of five separate sections, used in combinations appropriate to the types of collections at each service site. Among the significant findings of this study are the following:

- The sample appears to represent adequately a wide range of linkage sites where a tangible information resource (a "collection") is a dominant aspect of the linkage service.
- The activities represented by these information service sites did not display a few well standarized work-role patterns, but rather showed considerable diversity. The kinds of materials, artifacts, functions, and activities considered by these sites

to be education information resources were numerous. Many sites performed a large proportion of all service activities, but the activity mixes were unique.

- There are important and consistent differences among collections that serve different functions, and neither leadership nor planning and policy factors can be safely generalized across different types.
- Managers are strongly oriented toward providing a maximum of meaningful information services to their users, but the level and quality of contact between the information services and their users, though exemplary for some, cannot be safely characterized as uniformly high.
- There are clearly distinguishable operating service orientations among sites; these have important ramifications for maintaining the overall basis for satisfying education information user needs in the United States.
- For a sizable proportion of sites, there is unused capacity, unserved potential audiences, and well motivated managers; but the problem of contacting and stimulating potential users has not been adequately solved.
- There is considerable agreement about the kinds of new files that would be useful. There is a core of commonly needed content, but also a complement of diverse, less universal needs.
- A wide range of equipment and technology is used. Generally, managers are informed about advanced technology, but see this technology as not providing ready-made solutions to major problems.
- Inter-organizational communications follow the familiar vertical wholesale-retail pattern conducive to efficient distribution, but not to problem sharing and solving between retailers.
- Of the methods the information services used to discover what their clientele might want, about one-third involve direct contact at the moment of user need; the remainder are less immediate and direct, such as studies or evaluations.
- Client satisfaction with the service is determined mostly by formal feedback and follow-up procedures. About one-third could describe no use they had made of client need and satisfaction information.

- The pattern of service request channels is different for print, non-print, and machine readable collections.

- Distinctions can be drawn between the different goal-oriented viewpoints that provide the initial impetus to development of a collection; i.e., collection-oriented, audience-oriented, product-oriented, evolutionary high-level decision, or program.

- More than half the sites reported that they have unused capacity to serve additional users, but only a tenth would use budgetary increases for tactics aimed at stimulating the demand for services, such as marketing, promotion, and needs assessment studies. However, about a third of the sites have plans for changes that would include demand-inducing activities, such as linking agents, user involvement, etc.

- Staff is the single most flexible, general-purpose, and costly item. With few exceptions, staff are the first additions if budgets are increased and the last deletions if budgets are reduced.

- Staff size ranged from 1 to 78, but with the median values of seven full-time and 1.5 part-time staff. Forty-seven different work roles were mentioned, but 20 of these were mentioned only once. The most frequently mentioned roles were clerk-typist/secretary (36%), library science subject-matter specialist (34%), administrator (28%), director (28%), clerk (17%), and computer searcher (15%). Almost half the respondents judged their staff's capabilities as not totally adequate and described areas for improvement of such capabilities. However, there was great diversity in responses regarding the content, and only three areas (on-line searching, technical training, organizational development) received more than three nominations each. Maintaining a match between staff capability patterns and requirements for staff training is clearly not a standardized activity.

- Organizational and political constraints within which the information services operate do not appear to contribute a sense of stability. The impact of outside factors on the service's ability to plan and control its operations and fate is seen as negative six times more often than as positive. Managers have no very well defined and well developed source of help for solving their problems of planning in the face of instabilities introduced by external factors.

- Mutual problem-sharing and solving with other information linkage services would depend on identification of highly similar services. Many managers believe their operations to be unique, and half of the managers can identify only two or fewer similar sites in the United States. Technical functions are the main bases for judging similarities, not type of client served, despite the common perception that client motivation is the most ubiquitous problem. These findings do not vary noticeably for different types of collections.

- Five-sixths of the respondents felt that cooperation should be coordinated at national and state levels as contrasted to local levels.

- Two major themes in the responses were (1) improved communications among elements in the educational information service complex and (2) incentives for cooperation and non-competition.

- Mutual problem sharing and solving seem acutely needed on many fronts, but especially for anticipating and ameliorating the planning instabilities introduced by outside factors, for achieving mutually beneficial operative stances, and for finding efficient ways to contact and motivate users of these educational information services.

While the SDC study provides a general picture of "collection-based" information services, it fails to provide much information concerning "downstream" linkage activities.

> It is assumed that maturing linkage programs will continue to move "downstream" from information retrieval functions with which many of them began, in the direction of problem solving, technical assistance, staff development, and maintenance of innovative "workplaces" close to the classroom. Bibliographic and publications services will be augmented by media and human services. Instead of conveying stock information and products from the R&D sector to the schools, linkage programs will assist school cooperatives in generating their own locally appropriate information and products.
>
> (Butler-Paisley and Paisley, 1975, p. 5.2)

The following several sections provide further information on "downstream" linkage activities.

B. State Dissemination Programs

Several studies are available that provide information on the "down stream" linkage activities of specific types of organizations.

Perhaps the most current source of information regarding SEAs, ISAs, and other educational dissemination agencies is contained in the Research and Development Exchange (RDx) "Baseline Reports." Each of the five RDx Regional Exchanges compiled descriptive information about the dissemination activities of OE Regional Offices, SEAs, and, where applicable, ISAs in their respective service areas. Each report also contained demographic data about the school districts in each state, and three of the reports described the dissemination activities in a sample of local education agencies (LEAs). The Far West Laboratory contractor prepared a summary synthesis, intended to provide an integrated description across the 33 states served by the RDx (Lloyd-Kolkin and Hood, 1977). Subsequently, the RDx updated its baseline survey (R&D Exchange, 1978). Although the initial baseline compilation was far from definitive, it provided a broad overview of features and patterns of dissemination efforts in the five regions. Three striking features emerged from the analysis of the original Baseline Reports:

1. Dissemination efforts at all levels are highly decentralized.
2. Dissemination activities and structures vary widely both among and within regions, states, and agencies.
3. Interest in dissemination as a special concern is increasing in most education-related agencies.

The summary report notes:

> The decentralization and variety of activities and structures suggest that a single model of dissemination may not be possible to describe or to apply to present or future dissemination efforts. Certainly, no clearly defined, consistently applicable model is apparent in the information and examples contained in the [Baseline]

> reports. However, further analysis of the present reports and carefully focused future data collection may suggest several primary patterns or loosely coupled models, each of which falls into a general, very broad model [that is more] applicable to specific situations or in particular environments.

The RDx Baseline synthesis report reviewed briefly each of several existing nationwide dissemination activities, including the National Diffusion Network (NDN), dissemination of Project Information Packages (PIPs), the R&D Utilization Program, the National Dissemination Leadership Project (NDLP), ERIC, and other federal and regional activities. The report continues with descriptions of the following:

- Regional
    - OE Regional
    - Regional JDRP Involvement
    - Dissemination/Feedforward Concerns of Regional Offices
- State Educational Agencies
    - Description of SEA
    - Content of SEA Dissemination Materials
    - Channels of SEA Dissemination
    - Feedback/Feedforward
    - Exemplary Practices
- Local Education Agencies
- Implications for Regional Exchange Functions

The following summary statements are noted:

Regional Offices. In general, the OE Regional Offices function primarily in the dissemination field as transmitters of Federal regulatory and fiscal information in certain narrow domains. They interact primarily with SEAs and occasionally with large LEAs. Because dissemination has only recently been mandated as a potential function of the Regional Offices many are still in the planning phase in regard to dissemination.* Individual divisions within each Regional Office generally distribute information about their own programs without central coordination. R&D information per se is almost never a major dissemination focus; contact with NIE and its programs, although formally recognized, is extremely limited.

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* Note: Later in 1977, DHEW decided to recentralize many of the functions of its Regional Offices; however, by early 1978, the scope of the dissemination role in OE Regional Offices was clarified and significantly expanded.

State Education Agencies. The states vary widely in their dissemination activities. A few have highly developed and well coordinated programs and channels for dissemination. It is more common, however, to discover decentralized dissemination activities within individual branches of the SEA--with each attempting to plan and manage the dissemination of its own activities. More attention is now being paid to dissemination planning and policy; many states are currently beginning to take a serious look at their dissemination policies and activities. Much of this interest has been generated by NIE State Capacity Building grants and by the requirements of ESEA Title IV-Part C dissemination planning requirements.

Most states also indicate a need for training in the use of other educational information and data bases. Newsletters are one of the most common channels for the dissemination of information about educational innovations. Most states do not disseminate information about national R&D products and outcomes, but are much more prone to disseminate information about innovations developed within the state. Several have highly developed state validation programs to identify and disseminate locally developed promising practices.

Intermediate Service Agencies. The ISAs, which take on a variety of forms and functions, appear to offer a potentially vital link in the effective dissemination of educational practices since they directly interact with LEAs and often carry out the bulk of the state's dissemination activities...

About two-thirds of the states described in the baseline reports have Intermediate Service Agencies (ISAs) or are planning them.

ISAs are widely deemed to be of great importance as a dissemination link between the SEA and the LEA. In general, the baseline data collected so far suggests that while the potential for such linkages is great, as evidenced by the Texas experience, many such linkages are still underdeveloped at the present time.

Local Education Agencies. Most of the baseline reports provided only demographic data about the nature of the school districts in their regions. Three exchanges attempted to sample LEAs in their region....Some general findings of importance:

(1) LEAs vary in size and clientele, a factor with implications for how they wish to tap into dissemination networks. Large

districts may want to tap into national resources rather than linking with rural districts in their own states.

(2) Dissemination activities at the LEA level are highly decentralized, being spread among many individuals. The role of who does what varies according to size of district.

(3) Information-seeking about new programs/products tends to be highly informal and interpersonal, such as meetings at conferences, seeking out old friends, etc. It is non-stylistic, serendipitous, and typically limited to what is locally accessible.

(4) Adaptation rather than adoption of new practices and programs is desired.

(5) Views about the NIE Catalog are varied. Most LEAs are unaware of the Catalog. Educators want simply presented materials that take little time to read or sift through; they also need training in how to search for relevant materials. Use of ERIC is low. The many sources of educational materials need to be consolidated.

(6) LEAs look within their own district--or to the SEA if funds are available to install new programs--for help in implementation. Otherwise, they rarely go to external agencies. Small districts are more likely to go to state colleges for help because they lack the time and resources to do the job themselves.

(7) Schools need more money to select and install new programs.

(8) Schools may need follow-up assistance of an inservice type or help in informing the public of what they are doing.

(9) Demonstrations and observations of actual action and functions seem to count more in evaluating new programs than do printed descriptions or past evaluations. The immediate reactions of teachers are important. Some [LEAs] do conduct formal evaluations of new programs, however.

(10) Teacher input goes through formal and hierarchical channels which are feedback mechanisms. Some teacher input occurs at district meetings, inservice training, etc.

(11) Professional associations may be a source of information about new programs, depending on the state.

(12) Materials are needed in the following areas:

(a) programs for gifted students
(b) career education
(c) individualized learning
(d) health and special learning problems, particularly learning disabilities
(e) information of innovative classroom techniques
(f) elementary language arts, social studies, and reading programs.

(13) [Staff] training is needed in the following areas:

(a) needs assessment techniques for teachers
(b) selection/adoption of materials.

Late in 1977, the RDx Regional Exchanges updated their baseline and, with editorial assistance from the Far West Laboratory RDx System Support Services, produced An Overview of State Dissemination Activities (R&D Exchange, May 1978). This overview provides current information on state agency dissemination plans and structures, including the location of responsibilities for dissemination within the state organizational structure; a description of the variety of dissemination resource bases and capabilities in various states; a discussion of linking systems, including description of the roles of intermediate service agencies (ISAs); and an analysis of expressed needs for knowledge synthesis and linkage training.

Among the interesting highlights of the report are the following:

State Plans and Structures

- Fifteen of the 33 states served by the RDx had adopted state plans for dissemination, and another eight were developing plans. The NIE-sponsored State Capacity Building (SCB) Projects seem to be an important factor, since 13 of the 15 states that had adopted plans had used SCB funds to develop their dissemination efforts.
- The initiative to develop dissemination capacity at the state level is most likely to originate in the state education agency itself, but legislation provides added impetus in some states.

- State objectives vary by types of need identified and by resources already available to meet those needs.

- One common objective can be identified: the establishment throughout the state of a linkage network resulting in the two-way flow of information between the resource base and educational practitioners.

- Given the SCB impetus, it was not surprising that the dissemination strategies to support the various state objectives fell into the three SCB components: building a resource base, establishing a linkage system throughout the states to help users obtain resources, and developing a leadership component.

- Dissemination leadership/coordination responsibilities were identified in 13 of the 33 states.

- In general, there are two types of SEA dissemination activities: programmatic efforts (e.g., in vocational or special education), and more generalized efforts (e.g., promoting exemplary practices).

- Only in Texas is there a Division of Dissemination which assumes responsibility for all dissemination on a statewide basis. In most states, generalized dissemination is one of several communication functions handled by a particular division or office. Often, more than one office tries to coordinate various aspects of dissemination within the state. These offices and divisions are located at various levels within the SEA organization.

Resource Base

- Among the most common resources at the state level are: (1) an information search and retrieval capability, (2) an array of exemplary practices, and (3) human resources for technical assistance and consultation.

- Twenty-one of the 33 states have developed statewide computerized information retrieval systems. These systems differ with respect to their capability and the ways information requests are processed. Most systems tend to be linked to several data bases through contractual agreements with data base services. Requests from users (e.g., teachers, administrators, school board members) are frequently handled through intermediaries.

- Every one of the 33 states has submitted and has one or more programs that have been approved by the Joint Dissemination Review Panel (JDRP). In addition, 14 of the 33 states have developed their own state procedures for identification, validation, and dissemination of exemplary practices. In some states, support for implementation and replication of exemplary practices is also provided.

- Ten of the 33 states report having established one or more human resources or talent bank files. Two more states are planning to develop such files.

State Linkage Systems

- Twenty of the 33 states have defined a linkage concept, but each of these states has developed a unique configuration of linkage roles, structures, and activities.

- Intermediate service agencies (ISAs) exist in 23 of the 33 states. In 16 of these 23 states, the ISAs play an active linkage role.

- Many states consider the functions and activities of their NDN State Facilitator as one of their primary linkage arrangements.

State Dissemination Needs

- Leadership. Many state representatives expressed concern with lack of leadership or coordination and with duplication of effort in SEAs. A need for regional coordination of dissemination, particularly to share information, was also identified.

- Resources. The high cost of comprehensive dissemination services and a concomitant lack of funds and skilled personnel to do the job were identified as major problems in several states.

- Reaching Audiences. In several states, a critical need was noted for disseminating information so as to assure its use by school teachers, along with a need to educate local educational agencies on the role of the SEA as a resource for educational service and information.

- Resource Base. Some states noted the need for improvement in the quality of both content and format of information disseminated. Topics specifically requested included: programs in basic skills; research on instructional techniques in reading; use of leisure time; citizenship; career and vocational education; sex education; institutional programs for mainstreaming; alternative schools; school dropout prevention; and lifelong skills (consumer education, personal finance).

- Staff Development. Specific skills required by linking agents to work with local schools included: analyzing and planning; conducting inservice training; using program selection guides and procedures; conducting educational measurement and assessment; identifying, validating, and disseminating program practices; working with teachers' centers; understanding competency-based education; explaining minimal-competence testing; stimulating community involvement; using needs identification and assessment techniques; and choosing among dissemination strategies and tactics.

State Capacity Building Projects

Another recent source of information about SEA dissemination activities is derived from the NTS Evaluation of the State Capacity Building Program. NTS has published abstracts on 24 states (1977 State Abstracts, Madey, Mojkowski, and Strang, September 1977) and has published more detailed descriptions, including comparative analyses, of nine of these states (1977 State Reports, Madey, Mojkowski, and Strang, July 1977). Each abstract is two to three pages in length and briefly describes the state's Capacity Building Project in terms of the following six topics:

- State Context
- Information Resources
- Linkage
- Leadership
- Clients
- Total Configuration.

Each of the nine state reports covers in more detail the "abstracts" topics listed above. The reports also contain information on:

- Pre-project History
- Overview of the SCB Project Proposal
- Evaluation
- Technical Assistance.

The state reports were each based on a two-day site visit to the SCB project by NTS staff, who conducted a series of interviews with key personnel. The first portion of each state report presents an objective view of the

Capacity Building Project. Knowledge of state characteristics and SEA features provides a backdrop for the description of the particular configuration of activities and resources used by each project. The background description is followed by an overview of the SCB project, its organizational structure, and its goals and objectives. Then each project component--information resources, linkage, and leadership--is examined in greater detail. A final observation section in each state report presents subjective remarks, by NTS staff, about each project.

Individually, each report describes (in approximately 26 pages) the dissemination capacity building effort in one state. Collectively, the State Reports provide a compilation of the SCB dissemination practices and change strategies which are being used in the development of a nationwide dissemination configuration. The State Abstracts provide, in a far more abbreviated form, the supplementary information for another 15 states. Among the observations made in the concluding chapter of the State Reports, the following are notable:

> As is clear from the description of the nine State Capacity Building Grant Projects, the variations among states are so great as to make even the most general of comparisons and contrasts difficult...
>
> Clearly, the analyses presented in this chapter are primative. Each is based on a two day visit and whatever documentation was available at the time of the visit. In addition, the ability to make fine distinctions is limited...
>
> There are a number of relationships that could be hypothesized in terms of these contextual variables and project characteristics. For example, one would expect the linkage system in small states to vary considerably from that in large states, and to some extent that is the case. [However, variation with respect to project characteristics is not neatly tied to contextual variables.] A host of non-numerical, even non-measurable factors interact to produce the type of linkage system employed...

The diversity apparent in the overall context of the states is reflected in the Information Resources Component of the project. Nonetheless, this is the most stable of the components. More is known about this component than the others, and several extensive data bases, such as ERIC, are readily available to all SEAs.

Linkages among the clients and the resource base are multifarious. Although the major focus of the linkage function in the nine projects is on the personal linker, there is some attention given to other linkage activities and services [i.e., targeted communications, conferences and workshops, training, mass media, computer-based user systems].

...The emphasis on the personal linker is reflected in all nine states, but diversity exists even within individual projects with respect to...(1) locus of control of the agents, (2) the role of the agents, (3) services provided by the agents, and (4) number of agents.

Locus of Control. The placement of the linkage agents and their sources of financial support are major determinants of the linkers' locus of control. When the project does not exert direct control over these individuals, linkage agents report to a unit other than the SEA and are paid with monies that do not belong to the [SCB] Project. To describe the nature of their relationship with such linkers, adjectives like "delicate," "tenuous," and "voluntary" are used by the [SCB] Project Directors....

Role of Agents. The linkage agent's role is related to project control. When the linker is not directly controlled through the SEA, the information consultant's role is usually a part-time one, with all or most of the individual's remaining time spent in functions (such as teacher, principal, librarian, or assistant superintendent) that are not specifically related to linkage....The quality, availability, and commitment of these individuals naturally varies even within a given project....

Services Provided....Owing to the relatively primative stages of development of many of the projects [a categorization employing the four-level DAG definition--spread, exchange, choice, implementation] can only be done at a gross level of analysis. Translated into actual linkage services provided, the most general continuum ranges from the simple delivery of information responses to the delivery of a wide range of program development and process assistance to the actual facilitation of implementation. Given the information available from the familiarization visits, it can only be said that the projects operate at all four levels and predominantly all [at] the latter three [levels].

Although most of the projects strive for the provision of comprehensive services, many projects are in the very early stage of the realization of this goal. The kind of services

> provided varies within some states, as well as varying across the nation. Within-state variation most often is related to the absence of strong control of the agents by the [SCB] Projects.
>
> Number of Linkage Agents. The absolute number of linkage agents...is relatively a meaningless piece of information unless presented within the context of the placement of the agents and their locus of control...
>
> The number of [SCB] linkage agents in a state varies more as a function of the definition of a linkage agent used by each project than it does in terms of the actual numbers of persons performing linkage activities for a project. In general, the definition of the linker and the conceptualization of the entire linkage role is more a function of political and organizational factors than of existing theory and experience with linkage roles. Projects often cannot or choose not to build linkage components *de novo* but use existing persons wherever they may be...
>
> In most projects it seems that no relationship exists between the number of [SCB] linkage agents and the number of potential clients to be served. No project is able to approach the 1:300 ratio suggested by Sieber [1972, p. 591]. This factor, however, does not appear to be a central consideration in determining the number of agents.

Five of the nine states have some form of intermediate service agencies (ISAs) with connections to the SCB Project. All five of these projects use their SCB monies to provide training for ISA staffs who serve them in some linkage capacity. For some states, this appears to be the only formal tie the SCB Project has with its ISAs.

The NTS *State Report* concludes with a point concerning SCBP that may be generalized to the larger concept of Educational Extension Agent Programs (p. 259):

> While the SCBP exists as an entity conceptually, its transformation in each state is effected differently by the general state context as well as the particular organizational environment in which the project is established.

The above information is derived from NTS staff visits in 1977 to the first nine states that received general SCBP grants. NTS plans to be in the field to obtain even more detailed information on all SCB states in 1978.

The State Education Agency as a Context for RDDD&E

Although much more dated than the RDx Baseline and the NTS State Capacity Building Studies, we consider the Survey of State Education Department Research, Development, Demonstration, Dissemination, and Evaluation: 1969-70 (Brickell, n.d.) to be the earliest definitive survey of RDDD&E in SEAs.* The Brickell study involved the gathering of data by: (1) site visits to twelve geographically representative states known to be active in R&D; (2) mailed questionnaires probing into the organization, financing, staffing, and content of state activities--not in the research unit alone, but throughout the departments; and (3) meetings at nine USOE regional offices which RDDD&E personnel from 31 states attended to discuss the situation in their own departments.

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* The Brickell study was in fact an update of a 1963-64 survey, Research in State Departments of Education (OE, 1965). This earlier study predated the Elementary and Secondary Education Act of 1965 that precipitated the expansion and differentiation of SEA R&D functions.

The Brickell study defined dissemination and demonstration as follows: "Dissemination in this survey is defined as the sending of information either about the results of research or the products of development or the methods and materials being demonstrated. Included are all forms of information transmission, as by consultation or other face-to-face communication, telephone calls, individual letters, newsletters, bulletins, brochures, booklets, manuals, films, recordings, exhibits, brief conferences, and short meetings--but only when the information is about research, development, or demonstration as defined here.

"Demonstration is defined as the deliberate display-in-action of new methods, systems, materials, or devices which are the products of research-based development. Demonstrations are for the purpose of showing the characteristics of new methods and materials to persons who might want to adopt or adapt them. Passive exhibits...are not to be included because they are not conducted under conditions of actual use. Do not include any training that accompanies demonstration."

The study is one of the earliest to attempt to communicate to respondents distinctions between research, development, demonstration, dissemination, and evaluation (RDDD&E). (See footnote, p. 31.)

Four mail questionnaires were employed. A total of 98 unit heads representing 38 states completed a general questionnaire seeking information about the administrative structure of the unit, its RDDD&E activities during 1969-70, personnel and training information, and observations and opinions regarding the organization and conduct of RDDD&E in the department. A second questionnaire asking respondents to categorize their RDDD&E budgets and distinguish funding sources for the year 1969-70 was completed by fewer than half of the 98 units. An individual questionnaire dealing with personal and professional background information was distributed only to persons "engaged more than half-time in RDDD&E for more than four months per year." (This provision excluded full-time summer RDDD&E assistants and those not engaged primarily in managing or performing RDDD&E.) A total of 354 persons submitted usable responses. Finally, respondents were asked to describe all recent (initiated on or after July 1, 1964) and current projects. Approximately 450 project reports were received. In all, 50 of 52 agencies (the 50 states plus the District of Columbia and Puerto Rico) responded in some way; however, 12 of the 50 respondents said that, using the definitions employed in the survey, they had nothing to report.

Although seriously dated, this survey is still one of the most comprehensive sources of information available regarding the organization and conduct of RDDD&E in SEAs. Moreover, the methodologies employed and the problems reported provide useful guidance for anyone attempting to assess SEA dissemination capacity.

Some interesting findings are:

> Of the 38 states reporting RDDD&E activities, 16 indicated that a single administrative unit in the department carried out such activities. The remainder reported RDDD&E taking place in from three to twenty different administrative units....Single RDDD&E units tend to appear in smaller departments; larger departments typically have multiple units performing RDDD&E.
>
> The work of the administrative units performing research and development in state departments is coordinated only informally with that of other units in the departments, and most of that is through the initiative of the various unit heads themselves.
>
> Financing. Only 31 states responded....[Of these,] over 80 percent received regular state funds for research and/or evaluation. At the other extreme, only 32 percent received regular funds for development. Demonstration [42 percent] and dissemination [58 percent] fell between the two extremes....
>
> The regular [state] allotments are most likely to be earmarked for dissemination and least likely to be singled out for demonstration. This differs from regular federal allocations....Federal funding is addressed to research, evaluation, and dissemination about equally, with considerably less attention given to demonstration.
>
> For each of the five RDDD&E functions, state departments are more likely to receive regular funds from the federal government than from their own state legislatures.
>
> Outside Affiliations. Some state education departments have stimulated the creation of an intra-state educational research council or similar organization or have affiliated themselves in one way or another with a council created through non-departmental initiatives. These councils commonly count university personnel as well as local school personnel in their membership....Only a minority [21 percent for demonstration and 24 percent for dissemination] maintain such intra-state affiliations.
>
> In contrast, a clear majority of the 98 units reporting said they maintained some kind of affiliation with an inter-state organization, most often for evaluation (78%) and least often for demonstration (60%).
>
> The data suggest that state departments find it easier to relate to other state departments than to other kinds of administrative units in their own states.

Climate for RDDD&E Functions. The psychological climate for state department research is not especially healthful....[Respondents] were convinced that evaluation and assessment are considered more important....A heavy majority of respondents agreed that the governor and the legislature in their states had a stronger interest in planning than in research....

Persons interviewed during the site visits and at the regional meetings repeated the now familiar list of constraints under which state department personnel must operate....The list of difficulties included civil service regulations, extreme slowness of administrative and personnel units to approve new professional positions at appropriate salary levels, political cross-fire between legislators and governors, highly restrictive legislative control over department organization and operations, low salary ceilings for governors and state superintendents under which everyone else has to crouch, and so on down the list. Such constraints...are particularly serious for RDDD&E functions, where responsiveness, flexibility, and the need for highly specialized talents from time to time are probably greater than in the regular operation of department programs....

Distribution of RDDD&E Effort. ...Less than half the units reported being engaged in all five activities....When responses are totaled, it becomes clear that dissemination [91 percent] is the most common activity...with demonstration [the least common, but still reported by 59 percent of the units]....

Most respondents said they provide technical assistance to others in the department and to outside agencies, especially in reviewing existing efforts, analyzing services needed, and helping implement projects....State RDDD&E personnel are not as able to provide systematic direct service as they are to provide occasional technical assistance simply because they lack sufficient numbers of personnel. [Data are provided indicating the percentage of units providing different types of systematic services for each RDDD&E area--Table 17, Appendix F-20.]

Staffing. Personnel problems in state education departments have long been a cause for lament....The RDDD&E state employee is a man in his thirties with a Master's degree and one or two years experience in research and development who has directed or coordinated some special project in the past five years....

Present Position Characteristics. The typical state RDDD&E employee distributes his time over research, evaluation, dissemination, and development; spends part of his time in management and part in program; has been in his present position for about two years; is supported 100% either by federal or state funds but not by both; and is employed solely in the state education department....

> ...[V]ery few state RDDD&E personnel spend as much as 61% of their time carrying out any given function. Instead, their time is distributed over a number of different functions. It is far more common for a person to spend less than 21% of his time carrying out a function....
>
> ...[A]lmost 90% of all state RDDD&E personnel [in 1969-70] have held their present position for four years or less. Thus, while they are relatively mature individuals, as shown earlier, they have only recently entered their present jobs....
>
> About 50% of the RDDD&E personnel are supported by federal funds. This is not very different from the proportion of federal support for the remainder of state personnel.
>
> Training. About one-third of the states provide some kind of training in research and development, usually for department personnel, but in some cases for local school personnel, ESEA Title III project staff, or other outsiders. Ordinarily a university faculty is involved in supplying the training....An occasional department provides paid study-leaves for staff improvement or reimburses staff members for university tuition charges.
>
> Recruitment. Most of the personnel interviewed during the study said that their departments continue to have difficulty in finding and adding skilled RDDD&E staff members. About one-third of the RDDD&E staff positions are filled by people who moved into their jobs from elsewhere in the department, half of them from another position in the same office where they are now employed. Another 25% came into their positions from a local school district, 20% from a college or university, and the remaining 25% from a variety of other locations. Many of those interviewed said new staff members brought into RDDD&E units from other department units or from local school districts are seldom given substantial training for RDDD&E tasks.

The reader is cautioned that the above quotations refer to 1969-70. Some of the "facts" have undoubtedly changed during the past eight years, but we have no SEA-wide update that provides the breadth of organizational, fiscal, personnel, and project information contained in the Brickell report. In concluding his report, Brickell offers a set of propositions, with commentary buttressed by study findings, that invoke a new conception of what research, development, and dissemination ought to mean in a state department of education. He argued that SEAs are unique settings for research and development, and that to grow and survive in that setting, those functions (including dissemination) must be uniquely fitted to the SEA context. The term "research" is used also to "denote the research-related activities which employ validated generalizations,...and applies equally to the related [RDDD&E] functions."

The propositions are:

> 1. The proper target of state education department research is not theory but improved practice.
> 2. The appropriate consequence of state education department research is not understanding but action.
> 3. The most suitable outcome is not a finding but a new law or regulation or advisory bulletin.
> 4. The correct mood is not reflection but a desire to reach the deadline before the impending decisions reach it.
> 5. The natural clients are not members of the profession at large, but administrative units within the state education department itself.
> 6. The correct location is not the laboratory but either the library or the operating schools.
> 7. The natural companion of a state department researcher is a state department planner.
> 8. The best research designs are not experimental but evaluative.
> 9. The proper kind of evidence to be gathered is subjective as often as it is objective.
>
> Given the kinds of decisions made by state governors, by state department personnel, and by state legislators, and given the criteria they use to make their decisions--criteria that include economy, ease of implementation, familiarity, conformity with established values, and public acceptance--there is more than one kind of evidence needed to guide those decisions. The testimony of those who would be affected by a pending decision, the advice of wise professionals, and the intuitive sense of well-placed people about any proposal [presumably including state options for dissemination, educational extension agents, or school improvement] need to be gathered along with all the hard evidence.

> 10. The appropriate criterion for judging the success of a program is not effectiveness but benefits in relation to costs.
>
> 11. The proper audience for a research report is those who make decisions about the operations of the schools.
>
> 12. The appropriate media for reporting findings are not professional journals but the public press and radio and television.
>
> State and local decisionmakers tend to be strongly influenced by their constituencies. This is especially true of elected officials such as governors and legislators, of course, but is also true of top-level professionals such as state commissioners who work directly with lay boards of governors and it is true of their second-level and third-level assistants... . Unfortunately, the project reports collected during the survey contain virtually no examples of how results were effectively communicated to non-researchers through mass media or otherwise.
>
> Conclusion. In short, the propositions add up to the notion that the state education departments are distinctive environments for research and research-related functions. While they are not entirely inhospitable to those functions, they do constrain them greatly. To conduct RDDD&E in state education departments requires that the constraints be recognized for what they are and that RDDD&E be designed to go with the grain of the institution rather than to go against it or to proceed as though the mission of a state education department were no different, for example, from that of a university. The mission of a department is indeed unique. Those interested in conducting RDDD&E must recognize it as such and carry out their work accordingly, even when that means some deviation from the norms for RDDD&E conducted in other settings.

In this quotation, Brickell is contrasting the missions and contexts of SEAs as a class from other classes of agencies and settings, such as those of the universities. However, there may also be differences within classes. The Brickell report suggests this, and it was an explicit point in the RDx Baseline and the NTS SCB reports. It is also a significant point made by Guba and Clark in their study of schools, colleges, and departments of education.

C. Schools, Colleges, and Departments of Education*

Over a three-year period (1975-77), Egon Guba and David Clark conducted a study of knowledge production and utilization (KPU) activities in schools, colleges, and departments of education (SCDEs). The study provided a wealth of current data about SCDEs, the role which they have played, are playing, and might play in educational dissemination and utilization. Only a few significant points are noted here:

> There are 1,367 institutions of higher education in the country operating teacher training programs. However, the number of such agencies involved or interested in KPU is much smaller. Only 125 of these SCDEs were involved actively in R&D productivity. The situation is less clear in regard to SCDE involvement, past and future, in D&U programs.
>
> At one extreme the data were quite convincing. Of the 642 baccalaureate-level institutions, almost none were involved in service relationships with schools, inservice relationships with teachers, or any discernable activity other than offering preservice classes...
>
> However, the relatively large numbers of Master's-level SCDEs maintained at a minimum, instructional contact with practicing teachers and a significant number indicated that they might become involved in a more extensive D&U program if they were encouraged to do so. This latter population of SCDEs would find D&U activity consistent with their general institutional mission in contrast to their baccalaureate counterparts.
>
> Almost all of the 125 active KP institutions also maintained strong involvement with SEAs and LEAs.
>
> On the assumption that one is searching for agency capacity and not attempting to build such capacity _de novo_, it would be reasonable to assume that there are 300-400 SCDEs involved in both KP and KU or potentially useful as D&U or KU sites.

Guba and Clark identified a number of contextual factors within the SCDEs themselves and their parent institutions of higher education which affected individual and institutional decisionmaking, and a series of negative and positive factors bearing on D&U involvement by SCDEs.

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* This section is based on a longer report prepared by Lotto and Clark (1968).

On the basis of data concerning (1) the demography of SCDEs, (2) an assessment of their current and past involvement in KPU, (3) an inventory of their resources, (4) a portrayal of contextual structure as organizations, and (5) an inventory of their current and projected external environment, projections were made about likely near-future scenarios for SCDEs in KPU. Before attempting to project alternative futures, the researchers argued that federal and other national-level planners have a limited number of tactics and strategies that can be brought to bear on any agency (SCDEs, SEAs, etc.).

They contend that any federal planning agency would end up attempting to use one of three strategies:

- Sustaining capacity
- Expanding capacity
- Improving capacity,

and that such strategies would be directed toward two generic targets:

- Institutional capacity
- Individual capacity,

using tactically the manipulation of a limited set of conditions:

- Time
- Training
- Support systems
- Facilities
- Environment
- Quality control mechanisms.

They illustrated the possible interactions among these sets of variables by defining the categories of manipulable conditions and individual and institutional capacity targets. What this would mean when applied to planning for KPU involvement in SCDEs is illustrated in their report.

Lotto and Clark (1978) conducted a re-analysis of data gathered for the knowledge production and utilization study to identify formal organizational structures which support dissemination and utilization activities in SCDEs. The population of SCDEs in the United States in 1976 consisted of 1,367 institutions. The population chosen for this sub-study is a subset of 671 of these institutions; 642 SCDEs offering only a baccalaureate degree in education and 54 SCDEs with specialized characteristics were eliminated. This truncation was based upon evidence from the earlier Clark and Guba study that these locations were unlikely to be involved in D&U activities.

Data from institutional questionnaires completed by a sample of 92 schools, colleges, and departments of education (SCDEs) which participated in the Clark and Guba study of knowledge production and utilization (KPU) were re-analyzed to determine the number and types of institutional structures which existed within these SCDEs in support of dissemination and utilization (D&U) functions. These institutions are a reasonably adequate national sample of the doctoral- and master's-level population of schools of education. All the assumptions undergirding the data from the Lotto and Clark analysis err in the direction of conservatism.

The primary sources of data were institutional questionnaires returned by 92 SCDEs and faculty questionnaires returned by 1,267 faculty from the 92 institutions during the school year 1975-76. These sources were supplemented by case studies of the SCDE population based on secondary data sources.

Each SCDE was classified with regard to:

- The mission or goal emphasis of the SCDE in dissemination and utilization,

- The organizational arrangements made by the SCDE in support of D&U,
- The evidence available that the faculty of the SCDE were involved in activities or processes associated with D&U,
- The products of D&U activity in the SCDE insofar as that could be determined.

D&U Mission. These four assessments led to a classification of SCDEs based on their involvement in D&U (strong commitment, positive support, acceptance, weak commitment, little/no commitment, and ambivalent commitment), which was then used to make a projection from the sample of 92 to the population of 671 SCDEs. On the basis of these projections, the following is noted with respect to institutional commitment (see Table 3):

- Twenty-eight percent (188 SCDEs) assert an institutional mission in D&U. Another 133 SCDEs have missions that would be at least complementary to, if not congruent with such D&U activities.
- Analysis of missions leaves no doubt that public SCDEs feel greater responsibility toward D&U involvement than their private counterparts. No private SCDE was classified as maintaining a "strong commitment," and only 27 of the 188 SCDEs classified as "strong commitment" or "positive support" were private SCDEs.
- Institutional mission commitment is dispersed across institutional categories by degree level. The percentage of SCDEs classified in the three highest categories (strong commitment, positive support, or acceptance) is nearly identical for all public categories (A - Public Doctoral Research Centers, 57%; B - Other Public Doctoral, 58%; C - Public Masters Teacher Centers, 60%; and D - Other Public Masters, 62.5%). The same observation can be made for the private categories with percentages ranging from 29% to 38%, with the exception that Private Doctoral Research Centers tend to eschew D&U missions - 17%.
- If institutional mission emphasis is taken seriously as an indicator of current or potential D&U involvement, this almost uniform dispersion of interest among the public SCDEs is very significant because of the large number of B - Public Doctoral and C and D - Public Masters Level SCDEs.
- An interesting aside is the projected group of 91 SCDEs classified as ambivalent. The ambivalence in this group represents a conflict between stated mission and the administrators'

TABLE 3

COMMITMENT OF SCDEs TO D&U ACTIVITIES BY INSTITUTIONAL TYPE FOR THE STUDY SAMPLE AND POPULATION

INSTITUTIONAL TYPE	NUMBER OF SCDEs BY MISSION GROUPS*											
	Strong Commitment		Positive Support		Acceptance		Weak Commitment		Little/No Commitment		Ambivalent Commitment	
	S	P	S	P	S	P	S	P	S	P	S	P
A. Public Research Centers	1	3	2	7	1	3	-	-	-	-	3	10
A. Private Research Centers	-	-	1	2	-	-	2	4	1	2	1	2
B. Other Public Doctoral	2	9	6	28	3	14	3	14	1	5	4	19
B. Other Private Doctoral	-	-	2	8	1	4	2	8	3	11	-	-
C. Public Masters Teacher Centers	8	58	3	22	4	29	2	15	3	22	5	37
C. Private Masters Teacher Centers	-	-	3	17	2	11	2	11	4	22	2	11
D. Other Public** Masters	2	23	1	11	2	23	1	11	1	12	1	12
D. Other Private** Masters	-	-	-	-	2	49	3	73	2	49	-	-
TOTAL	13	93	18	95	15	133	15	136	15	123	16	91

S = Actual number in the sample of 92
P = Projected number in the population of 671

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* In this and in subsequent tables, rounding to the nearest whole number for purposes of projection to the population may cause a slight variance in the total number of SCDEs noted in each institutional category and/or in the total population.

** The reader should note that these categories were least adequately sampled (8 of 91 and 7 of 169 respectively) and the possible error in projecting to the population is most likely to occur and most likely to be consequential.

> perception of centrality of D&U activity on the one hand and the faculty's perception on the other. In the case of the A - Public Doctoral Research Centers, the earlier project case study observation was that in doctoral institutions generally, and higher prestige institutions in particular, the faculty are unconvinced that factors other than teaching and research are rewarded by the university.

Based on mission analysis alone, Lotto and Clark conclude that, as a total group, doctoral- and master's-level SCDEs are not committed to D&U activity; however, significantly larger subgroups of SCDEs are committed (188 SCDEs classified as "strong commitment" or "positive support"). Although degree level and R&D productivity are poor predictors of D&U mission emphasis, locus of support and control (public versus private) is a predictor of D&U mission commitment.

Organizational Arrangements. Organizational arrangements employed by SCDEs to support D&U missions include:

- Formal structures maintained by the SCDE, e.g., field service bureaus or institutes, school study councils, and
- Personnel practices and policies designed to reinforce particular activity or productivity on the part of the faculty, e.g., promotion, tenure, and recruitment criteria.

In crediting institutional structures to SCDEs, conservative decisions were made. Specifically, the approximately 200 laboratory or demonstration schools maintained by SCDEs were not counted; similarly many efforts not unambiguously tied to D&U were dropped. Structures that were retained included field service bureaus, leagues of schools, school study councils, teacher centers or inservice instructional support units, and other formal units involving the SCDE in D&U. Projections to the population are displayed in Table 4.

Regarding the data in Table 4, Lotto and Clark note:

- Overall one must be impressed with the sheer number of D&U units...few of these structures appear to be outgrowths of federal support dollars.

TABLE 4

PERCENTAGE OF SCDEs MAINTAINING AT LEAST ONE FORMAL ORGANIZATIONAL D&U UNIT AND THE TOTAL NUMBER OF SUCH UNITS BY INSTITUTIONAL TYPES

INSTITUTIONAL TYPE	NUMBER OF SCDEs		
	Percent Maintaining At Least One Unit	Number Maintaining At Least One Unit	Total Number Of Units
A - Publics	100	23	30
A- Privates	80	9	29
B - Publics	78	69	151
B - Privates	38	11	26
C - Publics	64	117	154
C - Privates	46	35	53
D - Publics	38	35	35
D - Privates	43	73	73
TOTAL		372	551

- Institutional types are related to the maintenance of D&U structures. A - Public and Privates, B - Publics, and C - Publics typically maintain such units. In the remaining four institutional types they are found much less frequently.
- Despite the demur recorded by the A - Privates at the mission level, they are obviously involved in D&U.
- Even though the percentage of C - Publics maintaining a D&U unit is smaller, the number of units found in such sites is large. Because of the large number of B - and C - Public SCDEs, they jointly operate over half of all such units.

Schools of education are maintaining a remarkable number of organizational structures which are intended to foster improvement in school practice. There is an obvious relationship between the size, degree level, and prestige of these institutions and their formal arrangements in support of D&U; i.e., the doctoral institutions are more involved than master's institutions, higher-prestige SCDEs are more involved than lesser-prestige schools. But the relationship between degree level and prestige and involvement in D&U is nowhere nearly as marked as was found in the Clark-Guba study between degree level and prestige and involvement in R&D. Master's-level institutions are heavily involved in D&U in contrast with their involvement in R&D. Within the sample, for example, half the master's-level SCDEs maintained at least one D&U organization other than a demonstration or laboratory school.

Personnel Policies in Support of D&U. Although no school of education contended that D&U was preeminent in its reward system, i.e., that it was more important than teaching and/or research and scholarship in faculty evaluation, D&U activity is viewed as helpful or important in many institutions. In Table 5 the SCDEs are classified in terms of estimated support. Those SCDEs classified as "consistently noted as of importance" offered evidence that D&U was used by the SCDE in faculty evaluation consistently across data sources, i.e., the formal statement of promotion and tenure criteria and both

TABLE 5

IMPORTANCE OF D&U FOR FACULTY EVALUATION IN SCDEs BY INSTITUTIONAL TYPE

INSTITUTIONAL TYPE	NUMBER OF SCDEs		
	Consistently Noted As Of Importance	Noted As Used For Evaluation	Consistently Noted As Of Little Importance
A - Publics	3	17	3
A - Privates	4	3	4
B - Publics	19	66	4
B - Privates	-	26	4
C - Publics	44	102	37
C - Privates	29	35	11
D - Publics	46	45	-
D - Privates	49	96	24
TOTAL	194	390	87

administrator and faculty perceptions of criteria employed. Conversely, the low group denied the importance of D&U with consistency across the data sources. The middle group exhibited some, but not totally consistent evidence for use of such criteria.

Lotto and Clark observed:

- Concern that the reward system of SCDEs is wholly inimical to D&U activity is unwarranted. In only 87 SCDEs did it appear that faculty involvement in D&U would be in conflict with the formal system.
- Master's-level institutions have the least difficulty in incorporating D&U into the reward system; this undoubtedly occurs because they place less emphasis on R&D in their evaluations.

SCDE Faculty Involvement in D&U. Evidence of faculty involvement in D&U activites was limited to that provided by faculty self-reports on their involvement in: (1) publishing in practitioner-oriented journals, (2) serving in an editorial capacity on such journals, (3) making presentations at practitioner-oriented conferences, and (4) rendering *ad hoc* services to schools. SCDE deans or chairpersons also reported on the frequency of local school requests for service from the SCDE. Based on these data, SCDEs were classified into four levels based on extent of faculty D&U involvement. "Most" faculty involved, "many" (circa 50%) involved, "some" (less than 50%) involved, and "few" (25% or less) involved. Table 6 displays the projections.

- The A - and B - Public SCDEs affirmed their earlier-noted involvement in D&U.
- B - Private SCDEs scored higher as a group than would have been predicted from the earlier measures due to the high percentage of faculty reporting *ad hoc* service involvement with schools. This is consistent with a widely held belief that faculty in such SCDEs are engaged in private consulting relationships with LEAs and would explain the apparent anomaly, i.e., the institutional commitment to D&U activity is low, but individual involvement is high.

- Faculty in C - Public SCDEs reported less involvement than might have been predicted from prior measures. This may reflect an over-emphasis in the [available] process measures on publications and presentations at conferences tending to favor the doctoral-level SCDEs.

The Lotto and Clark report presents additional data, but these excerpts should be sufficient to demonstrate magnitude, character, and diversity of SCDE involvement in educational dissemination and utilization.*

TABLE 6

NUMBER OF SCDEs/LEVEL OF FACULTY INVOLVEMENT BY INSTITUTIONAL TYPE

INSTITUTIONAL TYPE	NUMBER OF SCDEs/LEVEL OF FACULTY INVOLVEMENT			
	Most	Many	Some	Few
A - Publics	16	7	-	-
A - Privates	2	-	9	-
B - Publics	36	42	11	-
B - Privates	9	13	9	-
C - Publics	24	60	38	61
C - Privates	13	6	19	38
D - Publics	12	34	34	12
D - Privates	29	-	85	56
TOTAL	141	162	205	167

---

* Following the description of current involvement of SCDEs, summarized above, Lotto and Clark discuss the likely responses of SCDEs to four generic federal intervention strategies (training grants, capacity building grants, networking grants, comprehensive dissemination system grants). These predictions were then used to formulate a set of recommendations for effective support of D&U capacity in SCDEs.

D. Teacher Centers*

Teacher Centers encompass diverse organizational arrangements and functions. The dominating notion behind Teacher Centers is that teacher needs are at the core. This is reflected in recent teacher center legislation which is aimed at meeting the professional needs of teachers. A center's effectiveness depends, in a large measure, on its sensitivity to teachers' needs and students' learning on one hand and its ingenuity and flexibility in creating programs which satisfy these needs on the other.

One or more of the following functions may be performed by a teacher center: Some centers may advocate a particular educational approach or philosophical viewpoint, such as open education or the multi-unit school. Some centers may respond to either teacher or institutional needs. Some centers may carry out specific projects which are limited in scope and duration, for example developing materials, field testing new products, or conducting research. Facilitating teacher growth, advocating a particular viewpoint, responding to needs, and carrying out a defined task are four most frequently encountered functions of teacher centers.

The organizational arrangement of a teacher center serves as a means for classifying them. Seven organizational arrangements have been suggested by Yarger and Schmieder in their chapter titled "Understanding Existing Teacher Centers" which appeared in Teacher Centers; Commissioner's Report on the Education Professions 1975-76 (OE, 77-12012, Washington DC: U.S. Government Printing Office, 1977). The categories begin with informal and loose structures and progress to more formal and rigid structures.

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* This section was prepared by Douglas Paul.

Organizational Arrangements

Independent Teacher Centers: These are characterized by freedom, flexibility, and trust among member teachers. Individual teacher needs are paramount to these centers. Participation is voluntary and governance is informal. These may be considered "grass roots" centers with no formal affiliation with established institutions. Dissemination would not be a concern here and linkages with outside sources are not maintained. Their life expectancy is probably very short. Therefore a census of their number is problematic.

"Almost" Independent Teacher Centers: These are characterized by flexibility. As with the Independent Teacher Centers these focus on individual teacher needs. Participation is voluntary but governance is formal. Affiliation with an established institution is the main difference between the "independent" and "almost independent" teacher centers. Again dissemination is not likely to be a concern. Outside linkages would be minimal although there would be a greater likelihood of establishing communication channels than exists with a center without institutional affiliation. There are probably less than 100 centers of this type.

Professional Organization Teacher Centers: These are broken down into two types. First, those centers created in order to comply with collective bargaining agreements. As such, these centers are dominated by the professional association and are concerned with association issues. Second, those centers created by a subject area association such as social studies or reading. Although these centers have a restricted focus they are more likely to perform dissemination functions than the first type of center. There are probably less than 25 centers of either type.

Single Unit Teacher Centers: These centers are administered by a single educational institution, and their activities are limited to members of that institution (e.g., a school district). Concern with institutional rather than individual teacher goals distinguishes these centers from the earlier types. The level of organization is high as is the sophistication of program development. Inservice programs are the most common activity of these centers. Dissemination would most likely occur through the inservice program. There are probably less than 100 centers of this type. However, recent teacher center legislation is likely to cause a significant increase in this type.

Free Partnership Teacher Centers: These centers involve inter-institutional arrangements at a simple level. The most common arrangement is a partnership between a school district and a local teacher education institution. The partnership is entered into voluntarily, and the needs of both parties are addressed by the partnership. Single unit teacher centers often evolve into a partnership arrangement if mutually satisfying interactions have occurred with the potential partner. Dissemination activities are more likely with the inter-institutional arrangement than with the earlier arrangements which have been described. Each partner is likely to have access to and be a recipient of different kinds and sources of information. Consequently, the information base is expanded. This two-member partnership provides an avenue for R&D-based dissemination whenever one of the partners is linked to either formal national information channels and/or informal R&D communication networks. There are probably less than 100 centers of this type.

Free Consortium Teacher Centers: These centers differ from the free partnership centers in the number of institutions making up the consortium. The latter are composed of only two institutions whereas the former involve three or more institutions. These consortiums are distinguished from the simple partnership arrangement since the relationships among consortium members is complex, formal, and fiscally entwined. Conflicting goals and needs are more likely than with the simple partnership and therefore the programs which are developed tend to be more general in order to address as many needs as possible. Although governance and organizational arrangements are complex and sometimes burdensome, the potential for the dissemination of R&D-based information is great. There is greater repertoire of human resources and formal and informal information networks. There are probably less than 50 centers of this type.

Legislative/Political Consortium Teacher Center: These centers differ from the free consortium arrangement in that they are legislatively prescribed. The SEA usually has formal control over the consortium using funds to persuade and involve participating institutions. These consortiums may be statewide or involve only portions of a state. They do not involve interstate arrangements. Administration, communication, and organizational arrangements are complex. The potential of R&D-based information dissemination is great, but it is mediated by prescribed rather than voluntary involvement. There are probably less than 40 centers of this type.

Implications for Dissemination

The above typology of teacher center arrangements may be used as a heuristic device for drawing out implications for dissemination. However, it is important to keep in mind that most teacher centers consider research and development irrelevant to their daily, local concerns. Most centers serve to assist teachers involved with their own curriculum development, and/or adaptations of commercial or R&D-based products. Teacher centers exist partly as a response to a top-down dissemination approach. Nevertheless, a continuum of types may be postulated. The independent and almost independent types are simple organizational arrangements with a narrow scope, idiosyncratic concerns, and with an informal governance structure. As such, R&D-based dissemination is not likely to occur unless it is an idiosyncratic need of an ambitious and energetic teacher. At the other end of the continuum there are the formal consortiums and free partnership types of centers. These may be characterized as complex organizational arrangements having a fairly broad scope, institutional concerns, and formal governance. As such, R&D-based dissemination is likely to occur since it is often a formal goal and an institutional need. In between these two extremes are single unit and professional organization teacher centers. As their placement on the continuum implies, the extent of dissemination is probably moderate but highly mixed, i.e., there is considerable variability among centers.

These charactersitics of teacher centers have implications for dissemination policy. On the one hand, greater face-to-face contact is likely to take place at the informal end of the continuum, but little R&D-based information is likely to filter down to this level. On the other hand, R&D-based information is more likely to be available and disseminated at the formal end of the concomitant need-sensing and translation activities that face-to-face interaction allows. Obviously, mechanisms are needed that take advantage of informal and indigenous characteristics of some teacher centers, i.e., those characteristics which promote sustained communication and helping relationships. And mechanisms are needed which have the advantages of the formal characteristics of centers that promote the dissemination of an R&D information base.

The federally supported teacher centers promise to be more oriented to dissemination and research utilization than their nonfederally supported counterparts. Utilization activities of federally supported centers include using research findings, familiarization with research for improving teaching skills, and training for the implementation of new curricula. Dissemination activities involve the centers and the SEA. Not only will the teacher centers disseminate results, but also the SEA will be accountable for disseminating information derived from teacher centers on a statewide scale.

E. The Emerging Teacher Corps Dissemination System*

Congress established the Teacher Corps in 1965 to strengthen the educational opportunities for children in schools serving concentrations of low-income families and to improve the training and retraining of teachers and teacher aides. Amendments to the original legislation have increased the emphasis to be given to demonstration and dissemination activities and several other program elements:

- Increased attention to improving the school/learning climate;
- Reform of educational personnel training and retraining;
- Extending Teacher Corps project funding from two to five years;
- Increasing collaboration among local education agencies (LEAs), institutions of higher education (IHEs), and communities in planning and implementing Teacher Corps projects; and
- Increased emphasis on local determination of project objectives and design.

Until recently, efforts to increase the exchange of information about promising products and practices among Teacher Corps projects through a system of geographic and programmatic networks were not centrally coordinated and did not provide effective national dissemination and utilization (D&U) services.

Teacher Corps programs funded in 1978 were to focus on demonstrating effective approaches of teacher education and on the dissemination of proven products and practices. A technical assistance procurement was issued in the Fall of 1978 to establish a project to assist the Teacher Corps Dissemination Unit to establish processes and procedures to provide centralized coordination of dissemination and utilization activities.

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* This section was prepared by James Eckenrod and Douglas Paul.

The resulting dissemination system is expected to use existing D&U systems for both internal and external dissemination of Teacher Corps products and practices.

The Teacher Corps Dissemination System Design

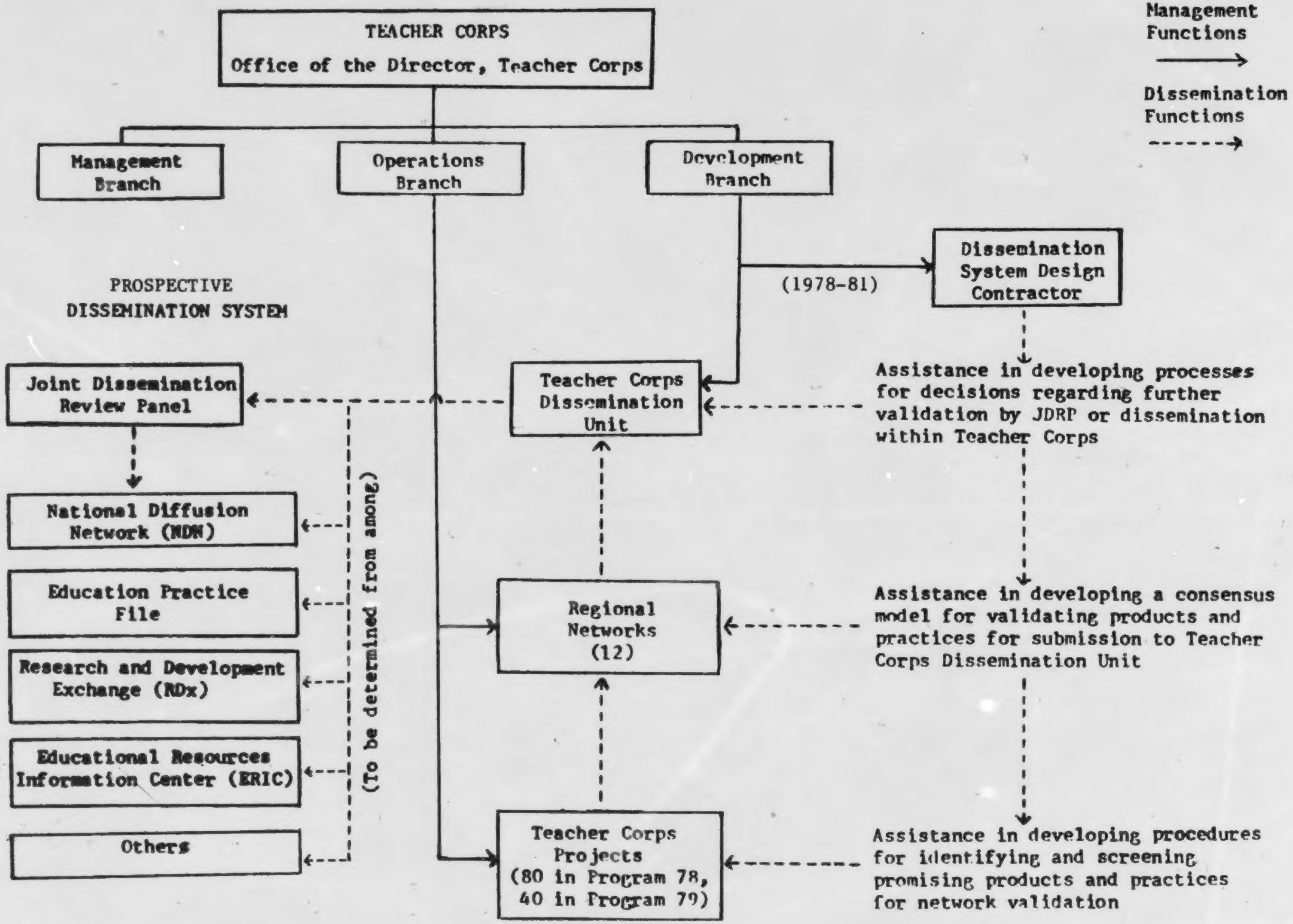
The dissemination system design contractor is charged with designing and pilot testing: (1) an internal information-sharing system for exchanging information about promising products and practices within Teacher Corps; and (2) a process for validating and disseminating products and practices to specified audiences external to Teacher Corps. The systems are to make maximum use of existing structures for information exchange within Teacher Corps and of existing dissemination systems of the Education Division of the Department of Health, Education, and Welfare, and are to become self-sustaining before March of 1981.

When fully implemented, the Teacher Corps dissemination system will operate through three levels of management: (1) the Teacher Corps' Washington Dissemination Unit; (2) twelve regional technical assistance networks; and (3) local Teacher Corps projects, eighty funded in July 1978 and forty to be funded in July 1979. The diagram on the following page indicates the line and staff relationships between these Teacher Corps units.

National Level

The Teacher Corps Dissemination Unit will be responsible for the final screening of network-validated products and practices for the following:

- Submission to the Joint Dissemination Review Panel (JDRP) for approval for dissemination through such established systems as the National Diffusion Network (NDN);
- Dissemination within the Teacher Corps, through established systems such as the Research and Development Exchange (RDx), the Educational Resources Information


TEACHER CORPS
Office of the Director, Teacher Corps
Management Functions
Dissemination Functions
Management Branch
Operations Branch
Development Branch
(1978-81)
Dissemination System Design Contractor
PROSPECTIVE DISSEMINATION SYSTEM
Joint Dissemination Review Panel
Teacher Corps Dissemination Unit
Assistance in developing processes for decisions regarding further validation by JDRP or dissemination within Teacher Corps
National Diffusion Network (NDN)
Education Practice File
Research and Development Exchange (RDx)
Educational Resources Information Center (ERIC)
Others
(To be determined from among)
Regional Networks (12)
Assistance in developing a consensus model for validating products and practices for submission to Teacher Corps Dissemination Unit
Teacher Corps Projects (80 in Program 78, 40 in Program 79)
Assistance in developing procedures for identifying and screening promising products and practices for network validation

Center (ERIC) or other USOE clearinghouses, or the Education Practice File, of those products which do not meet the JDRP criteria; and

- Distribution of products and practices to special groups or limited audiences through specialized dissemination systems.

Regional Networks

Input to the national dissemination system is from the twelve regional Teacher Corps Networks, organized as follows:

- I. New England
    - Connecticut
    - Maine
    - Massachusetts
    - Rhode Island
    - Vermont
    - New Hampshire
- II. New York
- III. Mid-Atlantic
    - Delaware
    - District of Columbia
    - Maryland
    - New Jersey
    - Pennsylvania
    - Puerto Rico
    - Virgin Islands
- IV. Mid-South
    - Kentucky
    - North Carolina
    - Tennessee
    - Virginia
    - West Virginia
- V. Southeast
    - Alabama
    - Florida
    - Georgia
    - Mississippi
    - South Carolina
- VI. Mid-West
    - Illinois
    - Indiana
    - Michigan
    - Minnesota
    - Ohio
    - Wisconsin
- VII. Plains
    - Missouri
    - Iowa
    - Nebraska
    - Kansas
- VIII. Southwest
    - Louisiana
    - Oklahoma
    - Arkansas
    - New Mexico
- IX. Texas
- X. Rocky Mountain
    - Colorado
    - Montana
    - North Dakota
    - South Dakota
    - Utah
    - Wyoming
- XI. Far-West
    - Alaska
    - Arizona
    - Hawaii
    - Idaho
    - Nevada
    - Oregon
    - Washington
    - Guam
    - American Samoa
    - Trust Territories
- XII. California

Each network is responsible for validating the products and practices developed or identified by the 6-12 Teacher Corps projects within its purview. Criteria for product validation, which take cognizance of the requirements for submission to the JDRP, are to be determined with the assistance of the dissemination system design contractor.

Each network is directed by an Executive Secretary, the contracting agent for the regional project. Executive Secretaries are directly responsible to Program Specialists of the Operations Branch of the Teacher Corps, consult with the Network Coordinator about general network policy matters, and collaborate with the national dissemination system design contractor as well as other technical assistance and evaluation contractors.

The directors of the local Teacher Corps projects within a network make up a Board of Directors. The deans of the Institutions of Higher Education constitute a Dean's Council. Each of these groups cooperates with the Executive Secretary in utilizing the resources of the Network.

Local Projects

Local Teacher Corps projects progress through four product and practice activity phases as follows: (1) Year 1, Developmental Activities; (2) Years 2 and 3, Operational Activities, including pre- and inservice training; (3) Year 4, Institutionalization Activities; and (4) Year 5, adaptation of program features by other educational agencies.

Projects in the program '78 and '79 cycles will be aided by the Site Specific Technical Assistance Center in planning for the development of more effective instructional products and practices. The dissemination system design contractor will provide assistance in designing and pilot-testing products and practices for submission to the regional networks for validation.

Each local project is operated through collaborative arrangements between the IHE, the LEA, and the community served by these agencies. The local project may be located in as many as four schools within a district. Separate grants are awarded to the LEAs and IHEs and project direction is accomplished through two groups: an elected Community Council and a Project

Policy Board, composed of at least the Dean of the IHE, the Superintendent of the LEA, and the Community Council Chairperson.

F. Intermediate Service Agencies*

There are a variety of ways of categorizing intermediate service agencies. A structural and functional view has resulted in five categories: Regional SEA Branches, Legally Constituted Intermediate Units, LEA Cooperatives, Specialized Units, and no intermediate units. The categories are arranged structurally from states with statutorily mandated SEA branches to states with no intermediate units and functionally from a full spectrum of SEA services to restricted and specialized services.

Some states have more than one form of intermediate service agency (ISA). For example, Ohio has SEA county branches, LEA cooperatives, and specialized service units. Indiana has five regional service centers, one of which serves as a division of the SEA. (Number of units of each category in each state are indicated in parentheses.**)

Regional SEA Branches

These units are staffed by SEA employees who provide state services to local schools. Capacity for dissemination may be constrained by reduced local participation in the governance of the unit. Decisions about provision of services may reflect SEA rather than LEA needs. Fourteen states have varying degrees of Regional SEA branches. For example, Louisiana has one branch of the SEA in New Orleans, and Indiana has one branch in the northern portion of the state which serves 77 LEAs. In contrast, Hawaii's seven LEAs are branches of the SEA. New Jersey's Educational Improvement Centers are closely tied to and monitored by the SEA although they are not "branches" in a strict sense.

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* This section was prepared by Douglas Paul.

** Through the assistance of Stephens Associates, College Park, MD, the data reported here have been updated to best estimates available in July 1978.

Arizona (4)
Hawaii (7)
Florida (23)
Idaho (2)
Illinois (2)
Indiana (1)
Kentucky (14)
Louisiana (1)
Massachusetts (6)
New Hampshire (25)
New Jersey (4)
New York (1 in NYC)
North Carolina (8)
Oklahoma (20)

Legally Constituted Intermediate Units

These units are housed between the SEA and a collection of LEAs. They tend to be structured in terms of their enabling legislation and SEA rules and regulations. Nevertheless, the dominant form of governance is a board of control composed of LEA representatives. They lack the autonomy of voluntary consortiums on one hand and they have the advantages of being locked into state resources and services on the other. Fourteen states have this form of intermediate units. Not all units are statewide.

Alaska (5)
Colorado (17)
Georgia (16)
Illinois (55)
Iowa (15)
Michigan (58)
Nebraska (19)
New York (44)
Oregon (29)
Pennsylvania (29)
Texas (20)
Washington (9)
West Virginia (8)
Wisconsin (19)

Similar in structure to the legally constituted ISA is the county office. The county office concept predates the legally constituted ISA. There are eight states with the county office structure:

Arkansas (?)
Arizona (14)
California (58)
Nebraska (94)
Ohio (87)
Montana (54)
New Jersey (21)
South Carolina (22)

LEA Cooperatives

These intermediate service units are composed of two or more LEAs. Participation is voluntary, governance is by representation, autonomy is higher than the legally constituted units. These structures have greater credibility with LEAs and knowledge of local needs, but they lack the resource and information base of the legally constituted units. There are at least 24 states with LEA cooperatives. The number of cooperatives varies from 1 to 75. Some states, such as Massachusetts, Ohio, and Indiana, have other forms of the intermediate unit in addition to the voluntary consortium. In other states, such as New Hampshire, the voluntary consortiums operate as private nonprofit agencies which sell services to participating districts.

Alabama (3)
Arizona (48)
Connecticut (6)
Florida (75)
Idaho (1)
Indiana (4)
Kansas (19)
Kentucky (7)
Maine (28)
Maryland (1)
Massachusetts (44)
Minnesota (9)
Mississippi (1)
Missouri (?)
New Hampshire (38)
North Carolina (2)
North Dakota (28)
Ohio (3)
Oregon (3)
Rhode Island (12)
South Carolina (3)
Tennessee (9)
Utah (4)
Wyoming (14)

Specialized Service Units

These units perform one or more specific services such as data processing, special education, or vocational education. Six states have specialized service intermediate units. Note, all but Virginia also have other forms of intermediate units.

California
Illinois
Massachusetts
Missouri
Ohio
Virginia

No Intermediate Units

In 1976, there were 12 states that had no intermediate units; however, there are now only four states that have no intermediate units and were planning none as of July 1978:

Delaware
Nevada
New Mexico
Vermont

Note: Stephens Associates of College Park, Maryland, is now conducting a series of studies addressing the evolving role and scope of ISAs. NIE-funded activities include:

- A description and comparative study of intermediate agencies where full or partial statewide systems exist, with particular emphasis on describing establishment, governance, organization/management, finance, staffing, physical facilities, and program/service characteristics and selected state education agency characteristics.
- A case study of a state in which an ISA system was dismantled.
- A comprehensive examination of the role of selected ESAs with respect to equalizing access and finance questions.
- An explication of critical issues associated with the intermediate service agency movement that have implications for educational policy or for future research and development needs.
- Creation of a lending library and a taxonomy/glossary/thesaurus.

Office of Education-funded activities will involve:

- A directory of intermediate service agencies.
- An annotated bibliography of selected books, brochures, monographs, articles, films, and other print and non-print media about ISA operations.
- Two monographs--one identifying ISAs and exemplary programs and practices serving in urban/metropolitan settings, the other exploring the conceptual and methodological guidelines that should be considered by policy planners as they structure or restructure statewide ESA systems.
- Briefings for USOE staff and for participants at USOE-sponsored conferences.

This set of ISA studies is expected to be completed in 1979.

G. Dissemination Role and Function of Associations and Other Types of Nonprofit Organizations*

In "The Exploratory Study of Statewide Educational Dissemination Capacity," Hood (1978) indicates that in spite of a "quite substantial body of existing information that can be organized, evaluated, and synthesized" about the dissemination capacity of various agents and agencies, there is not much information about the role nonprofit organizations of various kinds do or can play. He was referring to a broad category of organizations and not to the nonprofit research and development corporations like RAND, Systems Development Corporation, and the Stanford Research International.

This report will supply some of that missing information, but it is not definitive and ends up probably with more questions than answers. Since there is not much being written about these organizations, however, that may not be such a bad end product.

What Kinds of Organizations Will Be Covered in This Section?

In this section we shall examine several categories of organizations. These will include: (1) voluntary membership associations for professionals in the field of education at the national, regional, and state levels; (2) private philanthropic organizations at the national and state levels; and (3) voluntary collaborative arrangements involving combinations of local and state educational agencies, institutions of higher education, voluntary membership associations, and private foundations. In all three categories organizations and/or individuals within the organizations benefit in ways other than through financial reward or profit.

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* This section was prepared by Richard Dershimer.

Previous Review of Nonprofit Organizations of This Kind

These organizations have not been given a great deal of attention in the literature and particularly not in terms of how they help to disseminate information or knowledge. Gideonse (U.S. Office of Education, 1969) referred to them in his survey "Educational Research and Development in the United States" and described a selected group of foundations and professional associations in their role as "sponsors" of R&D.

Of the several kinds of nonprofit organizations, voluntary associations have received the most attention over the years. Important earlier writings about them were reviewed in the Encyclopedia of Educational Research, Fourth Edition (Dershimer, 1969), and need not be repeated here. Several of the works cited in this review describe how scientific or learned societies, as differentiated from trade or labor unions and professional associations, help their members (1) find suitable (that is relevant and scientifically noteworthy) substantive areas for study, (2) locate colleagues who can provide the most competent critical feedback, and (3) best diffuse the results of research throughout many social and communications networks of researchers and practitioners.

In the past ten years, associations have appeared more often than in previous decades as topics in journals and magazines for two disparate reasons: their importance in helping to increase the flow of scientific and technical information, and as arenas for competing political and social concerns. The latter issue is not relevant to the purpose of this review. On the matter of the flow of scientific information, several studies and writings deserve mention.

Two reports released in 1969 reiterated the vital role that associations play in disseminating scientific information. These were "Scientific and Technical Information," a report sponsored by the National Academy of Sciences, and the report of the Committee on Scientific and Technical Information of the President's Science Advisory Committee (COSATI, 1969). Both urged greater cooperation and coordination between federal agencies and associations. The National Science Foundation had taken steps in this direction several years earlier by issuing grants to several associations to study and improve their exchange of scientific information. The most relevant of these to the field of education were the studies undertaken by the American Psychological Association, the results of which appear in numerous sources (see, for example, Linder and Siegel, 1976; Nelson and Pollock, 1970; Garvey and Griffith, 1964, 1965, 1966).

Educational associations also have been given increased attention in recent years because of their changing political stature. On the surface these issues seem to have little to do with the topic of disseminating information. But political ambitions have led several national organizations to drastically alter the way they relate to, organize, and communicate with state and local affiliates (see, for example, Hitchens, 1973; also Bailey, 1975).

There also are clear implications for associations from the studies of how information flows through interpersonal interactions. From the studies of social and political systems, informal communication, and professional gossip, to name but three related topics, associations can better understand the importance of activities like annual meetings, conventions, and training programs.

Foundations have been written about from time to time. Nielson (1972) analyzed their influence on national policies particularly by the way they mobilized politically, socially, and economically important people and how they became part of the prominent policy networks on the national levels. Woodring (1970) and Stone (1969) wrote about activities of the Ford Foundation and what happened to their efforts to make reforms in American education through teacher training and curriculum and organizational change.

So the interest in nonprofit-membership organizations is not a new one. Nevertheless, the literature about them, particularly in the field of education, is spotty. There is not a single study of the kind that Egon Guba and David L. Clark (1976) made of schools, colleges, and departments of education, nor has any one organization been examined in the intensive way as has the American Psychological Association. The American Educational Research Association was included among some of the studies conducted by the Johns Hopkins Center for Research in Scientific Communication (Nelson, 1972a, 1972b) which was part of AERA's attempts to better understand the social and communication mechanisms of the field it served (Dershimer, 1970). There also are rare examples of how other educational associations like The Council for Exceptional Children evaluated some of their functions (Dershimer, Lingwood and Paisley, 1970; Zisa, 1969). But as Emrick and Peterson (1978) state in their report "Synthesis of Five Recent Studies," "Teacher organizations as an input and targeting channel have been generally underutilized" (p. 13). The same statement, perhaps in more understandable prose, could be made for all nonprofit organizations. To say that they are underutilized does not mean that they have been ignored, either in practice or in the literature. So the remainder of this report will briefly review some of the other literature that has been uncovered and discuss some of the implications that can be drawn for better understanding of the functions these organizations play and how a continued, more exhaustive and detailed literature search might be organized conceptually.

Four sections will follow. The first section will review and discuss implications from the literature on associations. The second section will do the same for foundations. The third section will discuss several other kinds of non-profit organizations. The fourth section will examine the importance of nonprofit membership organizations from the standpoint of the research and other writings on interpersonal communication networks.

Associations

In 1974 there were 572 national educational associations and 460 state associations (exclusive of commissions and boards) listed in The Education Directory (U.S. Office of Education, 1974). That list and those published in the Encyclopedia of Associations, Edition 8 (Gale Research, 1972) and the Standard Guide of American/Canadian Education Associations, Conventions, Publications, and Research Centers, 1971-1974 (North American, 1975), show that there are associations and then there are associations. The student in the field of communication, like everyone else, must recognize the differences. Several authors over the years have accounted for the differences by devising useful categories (again see Dershimer, 1969), the most recent of whom is Bailey (1975). He uses ten designations but confesses that "the taxonomy problem, with its combinations and permutations, defies tidy categorization" (p. 8). More bothersome for our purposes is that none of these taxonomies employ just the communication functions of associations as the significant variables. By using common knowledge of what educational associations do, it is possible to construct a relevant albeit oversimplified taxonomy that will help us better understand their differences.

The critical variable on which this classification scheme is based is the kind of information that associations transmit. Three categories emerge:

Category I. Associations primarily concerned with diffusing knowledge about the substantive issues of pedagogy and intellectually related matters. Examples of associations that fall within this category on the national level include: The American Educational Research Association, all discipline societies like the American Psychological Association and the American Sociological Association, the National Academy of Education, and the Association of Childhood Education International. The Northeastern Educational Research Association, another example, is regionally based. On the state level there are many educational research associations like the California Educational Research Association and the Pennsylvania Educational Research Association that are independent of any national organization.

Category II. Associations primarily concerned with diffusing information about professional practices of educators and the materials they employ. Examples within this category on the national level include the International Reading Association, the Association for Supervision and Curriculum Development, the National Council of Teachers of English, and the National Art Education Association. Almost all of the national associations in this category have state affiliates such as the California Association for Health, Physical Education, and Recreation; the California Council for the Social Studies; and the California Music Educators Association. The degree of autonomy and cooperation with the parent national group varies considerably from organization to organization.

Category III. Associations primarily concerned with diffusing information about political and other matters of importance to members and their institutions in the field. Associations on the national level within this category include the National Education Association (NEA) and the American Federation of Teachers, the American Association of School Administrators, the American

Association of Colleges for Teacher Education, and the National Congress of Parents and Teachers. There are regional associations such as the New England Association of Schools and Colleges. And virtually all of the national associations in this category have state affiliates.

This taxonomy obviously conveys distortions. In the first place, within each category there will be found a wide range of sophistication among associations. The Association of California School Administrators, for example, falls into the same category as all state teachers' associations, but it operates several inservice training programs, is responsible for a long list of regular and special publications, and can count on more than 5,000 persons to attend its annual meetings; by contrast, 36 of the state teachers' associations do not even have a journal (National Council of State Educational Associations, 1975-76).

The taxonomy has several other limitations. Associations vary widely in the extent to which they (a) communicate to their members, (b) facilitate communication among their members, and (c) represent their members' views to other audiences. Smaller scientific societies usually perform only the first two functions; only the larger societies can espouse all three. Some, like the American Association for the Advancement of Science, have shifted their priorities so that the tasks of educating the lay public about the accomplishments of science is given a very high priority.

The taxonomy also fails to account for the differences associations exhibit in adopting new forms of communication. Some associations in education, like the National Society for the Study of Education (NSSE), have shown only a few innovations over the past ten years. Others, like the American Educational Research Association, have vastly expanded their annual meeting and have added dozens of new ways that the members can gather to hear of each others' progress;

several new publications have been added as well as new organizational arrangements to facilitate informal communication. Some scientific societies like the American Psychological Association have shown even more inventiveness.

In spite of these and other limitations, this taxonomy suggests a way of beginning to categorize associations and provides some arguments to support those who favor undertaking more and more systematic studies of what these organizations do.

Before we move on to the next section, some attention must be given to the way associations sometimes band together voluntarily to reach some objective that no single association could accomplish on its own. Bailey (1975) refers to them as "umbrella organizations." But of the two examples he gives, only one, the Committee for Full Funding, fits the description I gave above. (The other, the American Council on Education, is a fully functioning, chartered membership association; Bailey himself acknowledges the differences between his two examples.) The Committee for Full Funding was founded and has been supported for more than ten years by a large group of organizations including the NEA, the AFL-CIO, and the National School Boards Association.

These cooperative arrangements vary from a high degree of formality to one where association representatives meet and exchange information in casual ways. Consider first some examples of formal arrangements. The National Council of State Education Associations is a fully functioning division of the NEA. In the 1960s there existed the Consortium of Professional Associations for the Study of Special Teacher Improvement Programs, dubbed CONPASS (see Fleming, 1971). A more recent example is the Consortium of Educational Associations for Educational Dissemination, formerly known as the Education Association Resource Group on Dissemination (EARGOD). CONPASS was supported through grants from the U.S. Office of Education and had several full-time staff members; the Consortium is subsidized by NIE and has consultants serving as part-time cadre staff.

There are just as many examples of informal cooperative arrangements. Some of these, like the so-called "Big Six," have clearly identifiable membership (the American Association of School Administrators, the Chief State School Officers, the Congress of Parents and Teachers, the National Education Association, the National School Boards Association, and the State School Boards Association) which meet regularly. (The Big Six also releases press statements.) Others are more amorphous, like the group of associations in higher education and selected federal bureaus that have met bi-weekly for lunch for more than ten years.

In spite of what these examples might imply, collaborative arrangements among associations are not common. As Holm (1976) noted, "the larger federations and associations have had great difficulty finding common elements on which to build cooperative programs" (p. 16).

Foundations

The Educational Directory (U.S. Office of Education, 1974) lists 25 foundations that "are either primarily educational in purpose or are known to be sponsoring educational projects."* As with the list of associations, there are wide variations in type and sophistication.

The "typical" foundation in education, as in most other fields, encourages proposals from scholars, scientists, or practitioners using committees of peers to assist with the final selection of projects to be funded. The Spenser

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* This list is not complete, for neither the Kettering nor the Spenser Foundations, two of the most active in education, are included.

Foundation is an example of this style and, as could be expected, maintains a relatively small cadre staff and a very quiet, informal operation.

At the other extreme can be found the Kettering Foundation. In the mid-1960s, Kettering formed the Institute for the Development of Educational Activities (I.D.E.A.) and gave it an operating budget and a semi-autonomous staff. I.D.E.A. has engineered several programs that encourage cooperation and communication among school district personnel (see I.D.E.A., undated; Kettering, 1976). An earlier example is the University Council for Educational Administration (UCEA), originally funded by the Kellogg Foundation in the 1950s. It facilitated communication among professors of educational administration.

The Ford Foundation operates both in the traditionally informal style of smaller foundations and through engineered programs. An example of the latter was the Comprehensive School Improvement Program, first launched in the early 1960s as a way of trying to focus school reform for maximum impact (see Ford Foundation, 1972).

Foundations seldom publish much about their operations other than descriptive brochures and annual reports. Therefore, it is difficult to use the literature as a way of understanding where they fit in the meta-communication system in American education. I.D.E.A. has much valuable knowledge and some data, mostly unpublished, about its national networks. One of its earliest projects, the League of Cooperating Schools, has been well documented by Goodlad (1975). But most foundations prefer to remain out of the public spotlight, so much of their impact on education is unrealized. Dershimer (1976) reported, for example, on how several national foundations were part of networks that were very influencial in shaping national educational policies in the 1960s and early 1970s.

Other Nonprofit Organizations

Study councils are the most visible kind of organization among the several that fit in this section. The first, the Metropolitan School Study Council, was formed in the 1930s by Paul Mort and his associates. An inventory published in February, 1975 by the National School Development Council showed 71 councils in existence.

Study councils "are groups of school systems which work together, usually under the sponsorship of an institution of higher education, to improve instruction through the solution of educational problems" (Caler and Danenburg, 1972, p. 14). Study councils clearly are communication networks usually with the flow outward from the "experts" at universities. As school practitioners grow more professional, the pattern and direction of information flow tend to change (Gurevitch, 1966; Beder, 1976), so the characteristics of study councils themselves appear to be shifting.

Twenty-five years ago, the study council was about the only organizational arrangement that allowed school districts to work cooperatively together. Many different forms can be found today. Some of these were spawned by Title III, ESEA funds in the late 1960s (as one example, see the Merrimac Education Center, Havelock and Havelock, 1974). In other cases the state education agency has taken the initiative, such as in the Texas Small School Project (Texas Education Agency, 1969). There is at least one example where a state education agency provided the channel for diffusing innovative ideas (Fox and Lippitt, 1967). There are various kinds of "networks" for school personnel, the Superintendents Network being an example of a nationwide arrangement (Merrow, 1974). Locally there can be found networks among schools within a given county like that in Wayne County, Michigan (Miller, 1977). Undoubtedly there are many other kinds of cooperative arrangements, some that are too informal to be given titles.

Interpersonal Communication and Nonprofit Organizations

There appears to be little agreement on the relative importance of formal compared to informal channels of communication for conveying new ideas. Obviously both are important. Frequently, however, the importance of nonprofit organizations, especially associations, to the flow of information through informal channels is overlooked, particularly by federal bureaucrats. So this section will review some of the literature on informal, or interpersonal, communication that has relevance to an understanding of the importance of nonprofit organizations in the scheme of things.

There is a growing body of knowledge about the relationship of communication networks with sociometric and power mappings (Compton, 1973). Crane (1972) showed that social factors can influence which ideas in science are likely to be transmitted widely. Martyn (1974) found informal contacts among members of medical school facilities the most frequently cited source of information.

Scientists and medical practitioners have been studied far more than professional educators. This is important to note for, as Price (1970) warns us, hard scientists, soft scientists, technologists, and nonscience persons may all have different social systems and ways of handling communication. Guba and Clark appear to support this because they found that colleagueship was not a significant source of support among the KPU educational agents they studied (Guba and Clark, 1976). Paisley (1970) found no evidence of an invisible college among educational researchers which throws doubts into the characteristics of the social systems of this field. Hagstrom (1970) provided some possible explanations for this as he examined the dual allegiances of most educational researchers both to the social sciences and to the practicing field. Carlson (1972) added some insights into how the informal networks among school superintendents function in his analysis of two groups, one in Pennsylvania and the other in West Virginia, and House (1974) described how communication flowed among a number of school districts in Illinois.

But of what importance are these networks to associations and other nonprofit organizations? There is some suspicion that the cadre staffs can influence messages and the channels through which they flow. This is more true among the practitioners' associations where considerable power rests with the chief executive officers and less so with scientific associations. Traditionally, in study councils, messages were heavily influenced by staff housed in the universities.

Nonprofits serve another purpose; they can be used like glass-bottom boats, as a way of viewing the sub-surface flow of communication. They can provide answers to the question of "who-is-saying-what-to-whom?"; a kind of sophisticated gossip that is so important in keeping up with professional and scientific fields. Associations especially provide access to privileged information, especially of the kind that answers questions like "who-is-doing-what-how-well?" They are entry points for messages to the (mostly) hidden recesses of the vast and complex social systems that make up the professional communities in education.

Summary and Conclusion

So what does this (admittedly) brief and inadequate review show? That nonprofit organizations as a topic of study is overlooked. We knew that. As a consequence, there is far less evaluation being made of the efficacy and efficiency of the channels of communication used by nonprofit organizations in education than in some other fields like psychology. But we knew that, too. Because education and educational researchers have failed to use and apply knowledge and skills of the communication researchers, those in policy and executive positions in organizations and governmental agencies are not using the most effective communication devices of which man is capable? Maybe.

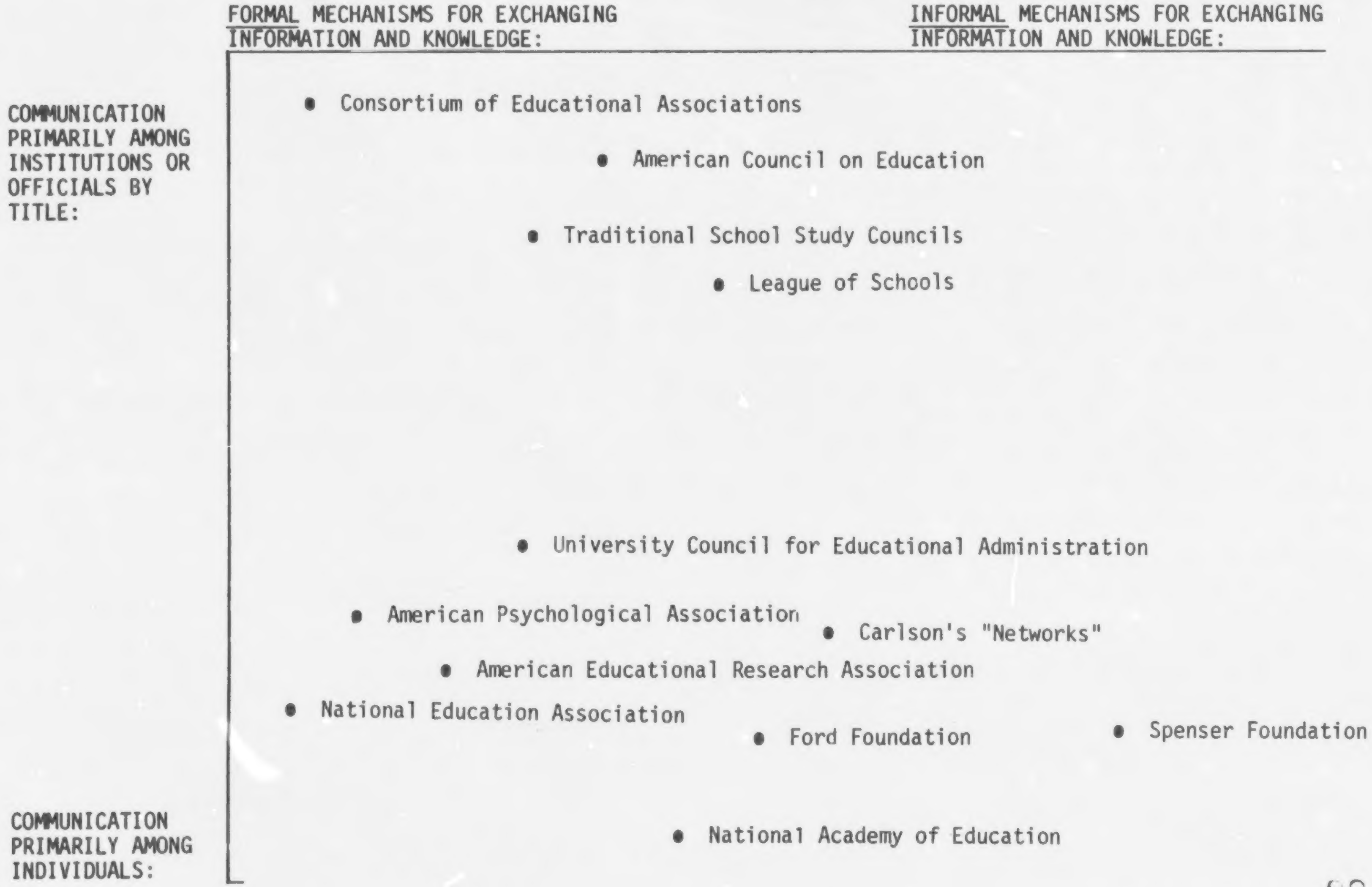
It is not good enough to call for more studies. What is missing more than data is the conceptual framework that allows us to most effectively interpret what we gather. There are a lot of oversimplified notions about how professional educators seek out and use information to change behavior. Many of the formal arrangements reflect these notions and lead to ritualized behavior (like beginning newsletters or new journals) when quite often much more informal arrangements (cocktail parties, travelling seminars) might prove more beneficial. Not that the more formal arrangements cannot induce communication, as the ERIC system itself may demonstrate.

As one way of (hopefully) encouraging a reconceptualization, and as a way of summarizing the reflections in this review, the author has devised yet a second schema that allows the several kinds of nonprofit organizations to be viewed in total. Figure 1 places nonprofits along two continua: formal to informal mechanisms for exchanging information and knowledge, and communication primarily among institutions (and officials) to communication primarily among individuals. Hence the Consortium of Educational Associations is placed in the upper left hand corner because only association officers attend its meetings and it uses few informal devices for communication. On the opposite extreme, the lower right hand corner, can be found the Spenser Foundation. It's executives most often talk directly and informally to prospective and actual recipients of grants and its publications are limited to annual reports and required financial statements.

Two more examples will help to demonstrate the value of this schema. In the lower left hand corner are the teachers' organizations, placed there

FIGURE 1

SCHEMA FOR COMPARING COMMUNICATION CHARACTERISTICS OF NONPROFIT ORGANIZATIONS IN EDUCATION


FORMAL MECHANISMS FOR EXCHANGING INFORMATION AND KNOWLEDGE:
INFORMAL MECHANISMS FOR EXCHANGING INFORMATION AND KNOWLEDGE:
COMMUNICATION PRIMARILY AMONG INSTITUTIONS OR OFFICIALS BY TITLE:
COMMUNICATION PRIMARILY AMONG INDIVIDUALS:
Consortium of Educational Associations
American Council on Education
Traditional School Study Councils
League of Schools
University Council for Educational Administration
American Psychological Association
Carlson's "Networks"
American Educational Research Association
National Education Association
Ford Foundation
Spenser Foundation
National Academy of Education

because they deal directly with individuals, yet they typically use formal mechanisms (newsletters, meetings, journals). Local teachers' organizations could be placed on the same level as the nationals, but moved farther to the right since they employ many more informal devices such as direct, face-to-face communication, gossip, and informal meetings.

No examples could be found to fill the upper right hand corner, even though anyone familiar with the daily lives of educators knows that examples exist. School superintendents from neighboring districts frequently lunch together and will invite new superintendents to join them. Book publishing companies often bring together professors of a given specialty for more or less informal gatherings usually during annual meetings or conventions. These gatherings have no name, yet they will be talked about and planned for as events--if not as "organizations."

As with the taxonomy discussed earlier, this schema has many inadequacies. Still, it is a step toward providing a more sophisticated mapping of these organizations.

* * *

Note:

Subsequent to the completion of this section, the Consortium published Private Organizations and Associations: Information Resources for Education (Arlington, VA, Consortium of Associations for Educational Dissemination, August 1978). This publication provides concise descriptions of the objectives, activities, programs, membership, sources of funding, organizational structure, and significant dissemination activities of 150 organizations representing seven categories: educational associations (51), professional membership organizations (46), educational laboratories and centers (12), advocacy groups (23), education-related organizations (9) (includes one misclassified educational laboratory), multimedia organizations (8), and foundations (1).

[P.H.]

H. National Network for Vocational Education*

The Network consists of one national center, 56 state coordinating units, six regional curriculum centers, and 56 state Liaison Representatives. These parts are connected by centrally controlled document and information systems. Despite some obvious slack in the connections and some apparent ambiguities and overlap in responsibilities and functions, this assemblage clearly qualifies as an operating network for R&D dissemination and utilization, and it may be the most advanced and firmly established anywhere in education.

It exists primarily because of some forward-looking federal legislation, beginning with the landmark Vocational Education Act of 1963. All parts of the Network are creations of that legislation, and its operation, growth, and improvement continue to be stimulated and financed by the Bureau of Occupational and Adult Education in the U.S. Office of Education.

An important element in its survival and success appears to be the fiscal authority held by key elements in the system: the state-based Research Coordination Units (RCUs). They serve within their respective jurisdiction as the administrators of federal funds for research and exemplary demonstration, which provides an effective power base for their R&D linking function.

A fairly sharp line is drawn in vocational-technical education between curriculum development and other kinds of development, research, and demonstration. Federal legislation has drawn the distinction, and organizational and administrative distinctions have resulted. Because of this, there are, in effect, two networks that appear to operate fairly independently, although there are certainly strong connections between them. One is called the National Network for Curriculum Coordination in Vocational and Technical Education, consisting of six Regional Centers and 56 state-based Liaison Representatives (see Figure 3). The other network is concerned primarily with research, demonstration, and development other than curriculum. It consists of 56 state-based Research Coordination Units (see Figure 2). The two networks are tied together through common document/information systems (ERIC/CE and RIVE) and are both supported by the National Center for Research in Vocational Education at the Ohio State University. While the National Center (until recently CVE) has provided support and leadership in vocational-technical dissemination and utilization for many years, its recent designation by USOE as a National Center promises to bring about greater integration and coordination of the existing networks. The National Center operates ERIC/CE and RIVE. It has responsibilities for close liaison with both the RCU and curriculum networks. It has explicit responsibilities to tie the vocational-technical information systems into the National Diffusion Network and other national systems, including RDx.

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* This section was prepared by Robert Peterson. Special appreciation is due William Hull and Joel Magisos, National Center for Research in Vocational Education, for supplying information and for reviewing this section.

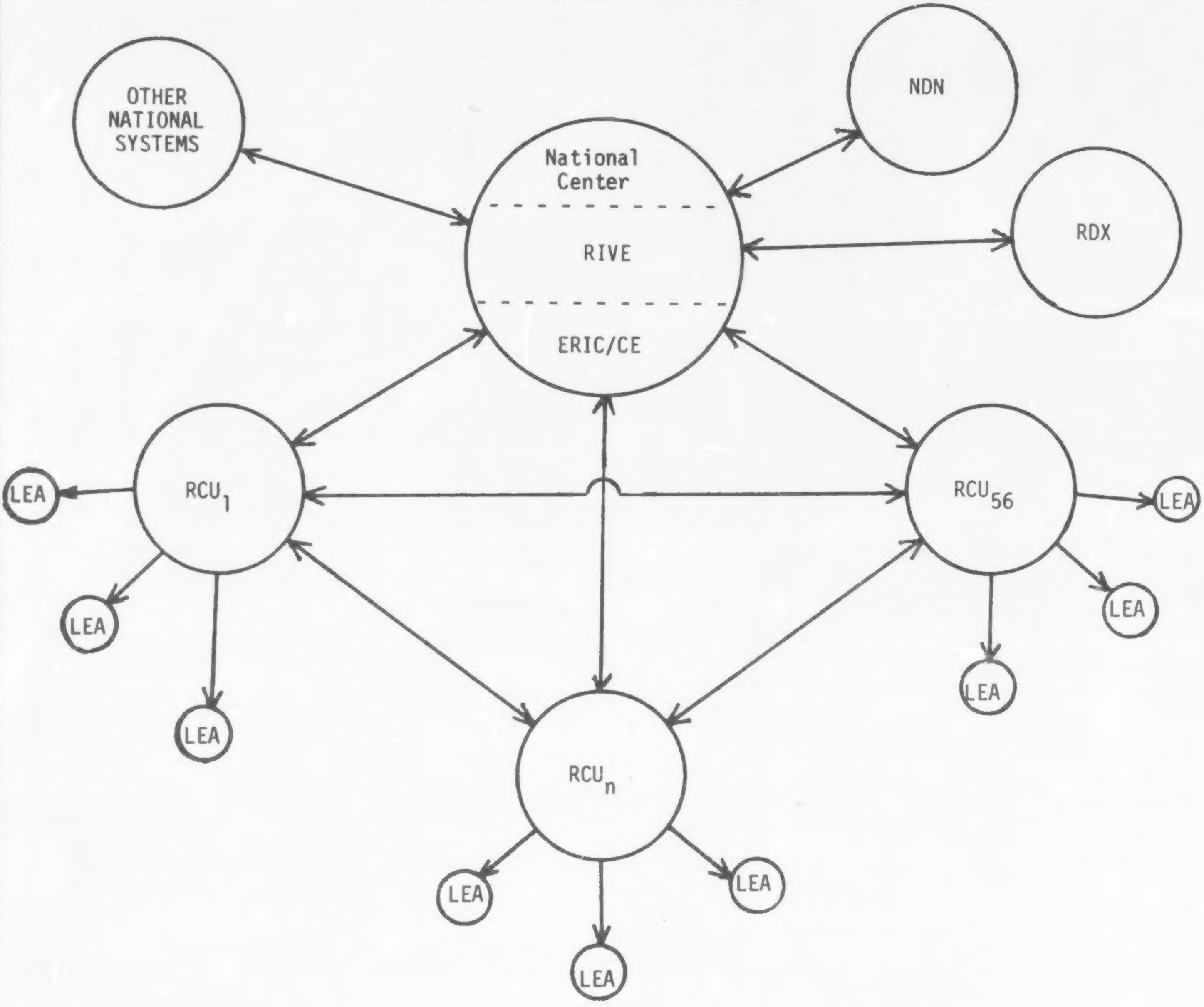
Parts of the Network

National Center for Research in Vocational Education, Ohio State University, Columbus, Ohio: Formerly the Center for Vocational Education (CVE), it has recently been given broad responsibilities to strengthen and integrate the entire national system for disseminating and utilizing R&D information and products in vocational-technical education.

Research Coordination Units (RCUs): One such unit in each state, district, and territory serves as a link between agencies within its political jurisdiction and the rest of the national network. They feed information into

FIGURE 2

RESEARCH COORDINATION NETWORK


OTHER NATIONAL SYSTEMS
NDN
National Center
RIVE
ERIC/CE
RDX
RCU$_1$
RCU$_{56}$
RCU$_n$
LEA
LEA
LEA
LEA
LEA
LEA
LEA
LEA
LEA

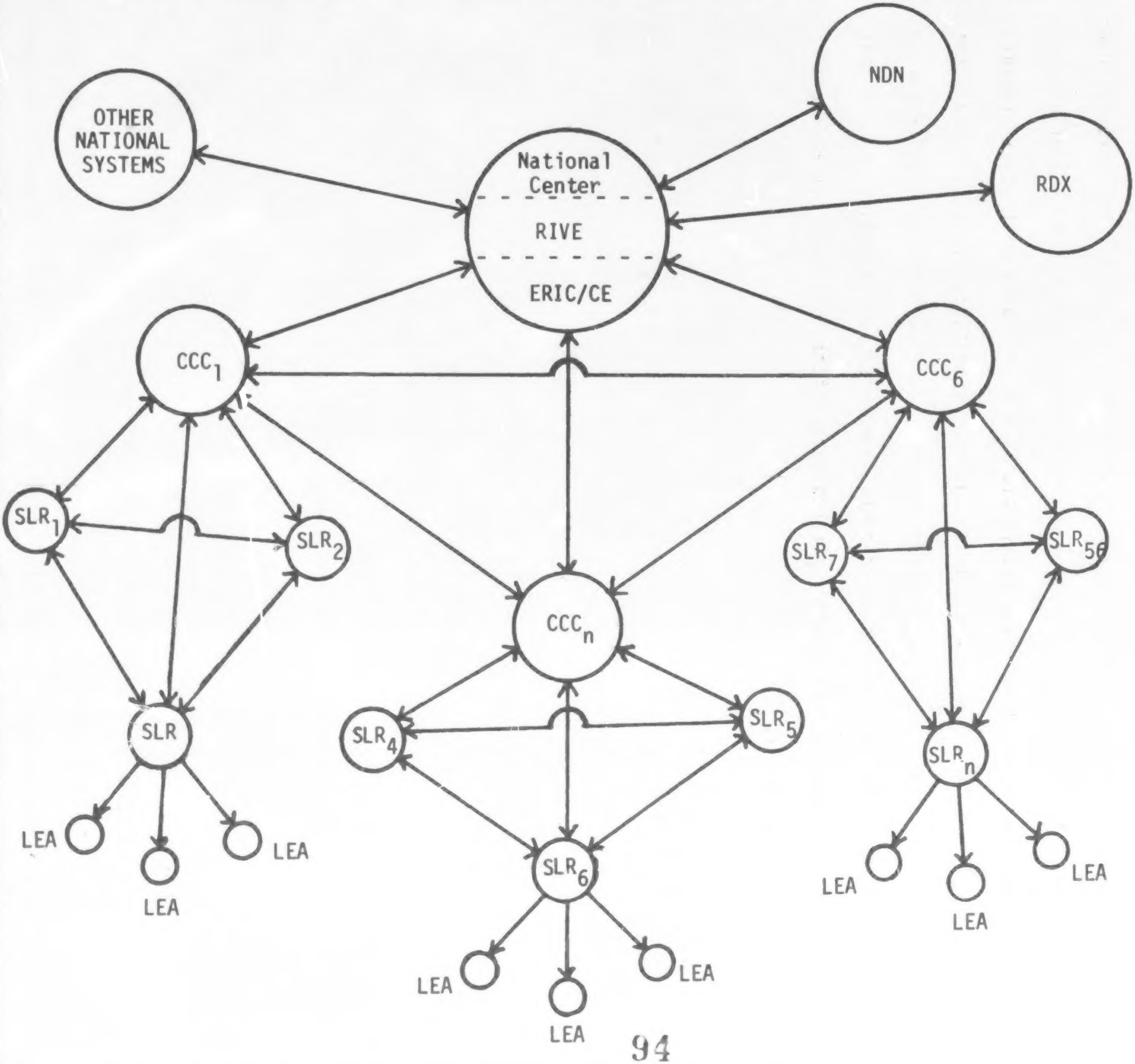
national storage, retrieval, and abstracting systems (see ERIC/CE and RIVE below), and provide information services to clients within their states. Some RCUs also provide technical assistance and training to LEAs and conduct proactive promotion of innovations. (RCUs apparently vary widely from state to state in how active and vigorous a role they play. Some serve merely as passive administrators of federal funds.) It is important to note that the RCUs are a link in the federal funding of research, demonstration, and curriculum development, as well as a link in dissemination/utilization. This fiscal clout is probably critical to their effectiveness as linking agents.

National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE): The 56 states, districts, and territories are divided into six regions, each served by a Curriculum Coordination Center (CCC). They link curriculum developers and users within their respective regions with one another and with the other five regions. Each state has a state Liaison Representative (SLR) who links intrastate agencies with the Regional Center, as well as with one another. (A fairly sharp line is drawn in vocational-technical education between curriculum development and other kinds of development, research, and demonstration. The NNCCVTE does for curriculum development what the RCUs do for research and demonstration. There does appear to be some ambiguity about the distinction in actual practice, however, and, therefore, some overlap between the two networks.)

ERIC Clearinghouse on Adult, Career, and Vocational Education (ERIC/CE): Operated by the Ohio State Center, it provides document services in adult-continuing, career, and vocational-technical education. There are over 600 complete ERIC collections around the country, some operated by RCUs as part of the information services offered to in-state clients.

FIGURE 3

NATIONAL NETWORK FOR CURRICULUM COORDINATION IN VOCATIONAL AND TECHNICAL EDUCATION


OTHER NATIONAL SYSTEMS
NDN
National Center
RIVE
ERIC/CE
RDX
CCC_1
CCC_6
CCC_n
SLR_1
SLR_2
SLR
SLR_4
SLR_5
SLR_6
SLR_7
SLR_{56}
SLR_n
LEA
LEA
LEA
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LEA
LEA
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LEA

Resources in Vocational Education (RIVE): Formerly AIM/ARM (Abstracts of Instructional and Research Materials for Vocational and Technical Education), this publication is distributed by the National Center. The conversion of AIM/ARM took place in 1976, and the Center has very recently been given responsibility to develop better access and crosswalk with other information systems. The new system relates closely to ERIC/CE, the educational abstracting services, and other national systems. A recent National Science Foundation study noted overlap and duplication between ERIC/CE and AIM/ARM, but this difficulty has been largely overcome since both have been contracted to the National Center.

How It Operates

Knowledge and products are produced by a wide variety of agencies--LEAs, ISAs, RCUs, colleges and universities, regional laboratories, the National Center, and private contractors and publishing houses.

The principal mechanisms for collecting and distributing information regarding R&D products and knowledge are the ERIC Clearinghouse on Adult, Career, and Vocational Education (ERIC/CE) and Resources in Vocational Education (RIVE), both operated by the National Center. Information is fed into these systems by the producers of the R&D knowledge and products. In all cases of federally-supported research (VEA-PART C), demonstration (PART D), and curriculum development (PART I), information is fed to ERIC and RIVE by the state-based RCUs and the Regional Curriculum Coordination Centers. They, in turn, feed information back from ERIC and RIVE to their constituents.

Various mechanisms are used within the states and curriculum regions for disseminating information to LEAs and other clients: newsletters, conferences, on-demand searches, etc.

Technical assistance in adoption decisions and implementation appears to be less clear and regularized than the information dissemination function. Some RCUs offer technical assistance and staff training; others do not. Services undoubtedly vary widely from state to state. The National Center's recently expanded responsibilities may lead to stronger technical assistance through the RCUs.

EBCE: A Special Case

Experience-Based Career Education (EBCE) is a major R&D product developed with federal funds. Because it was not developed with VEA funds, it did not automatically enter the National Network for Vocational Education. It did find its way into that system, however, by qualifying for demonstration grants under Part D of the Vocational Education Act. This put it in the RCU network.

But in addition to its representation as another product in the vocational-technical network, EBCE has also developed a somewhat autonomous system for dissemination and utilization. The four developer laboratories (NWREL, FWL, RBS, and AEL), with NIE direction and support, provide pre-adoption information plus materials and technical assistance to adopting school districts. But what is more interesting is that support capabilities once possessed exclusively by the four laboratories are now being acquired by 16 SEAs through the support and cooperation of NIE and the four laboratories. In addition, the some 200 LEAs that have adopted EBCE, plus the involved SEAs, have formed a national association called the EBCE Network. With help and encouragement from NIE and the laboratories, they have created a professional identity, publish a quarterly newsletter, provide mutual support and share information, and will become the principal mechanism for spreading the word and supporting adoption by other LEAs and states.

I. BEH Dissemination Programs and Structures *

Special education does have a national dissemination network, but with a distinctly different character than the national network for vocational education. Special education dissemination and technical assistance is largely supported by the Bureau of Education for the Handicapped (BEH). There are three notable aspects to the BEH dissemination effort: (1) heavy reliance on commercial publishing distribution channels, (2) redundancy of services, and (3) provision of substantial and varied forms of technical assistance.

Unlike most Office of Education programs, BEH places considerable trust in and emphasis on commercial publishers to disseminate new products. One dissemination project has been established to assure that BEH products are made available to publishers. The somewhat independent but overlapping services supported by BEH produce a functional redundancy of services similar to the concept of synergy described by Havelock. For example, there is a Special Education Material Distribution System, the National Instructional Materials Information System, and a catalog of BEH products. In addition, the Council for Exceptional Children (CEC), a private association, catalogs and disseminates information on special education material. These are not duplications but rather parallel and complementary efforts. To provide technical assistance, BEH has funded at least four national projects. Technical assistance is also provided by Regional Resource Centers and state education agency special education bureaus.

In summary, the BEH dissemination and utilization effort is multifaceted, complex, overlapping, and synergetic. It also has a strong "grass roots" character. There is no single center to the dissemination network with

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* This section was prepared by Douglas Paul.

spokes leading to subsystems. However, there is a unifying element to many of the projects, namely P.L. 94-142. This law calls for individual education programs for all handicapped children which, in turn, has created substantial demand for information, products, and programs in the special education area.

The Bureau of Education for the Handicapped provides funds for a wide variety of national and regional services. The services described here encompass varying degrees and levels of dissemination. The groupings of programs into national and regional services include a progression from product- to service-oriented programs for national services and general to specialized programs for regional services.

National Services

The majority of BEH programs deal with services of a national scope. Programs which are product oriented are listed first and programs which are more technical assistance oriented are listed last.

BEH Product Catalogue: Focus is on a comprehensive listing of BEH products and programs produced over the last 10 years. Primary criterion for inclusion in the catalogue is product replicability. Entries include product description, cost, and where it is being used.

BIOSPHERICS
Rockville, Maryland
(301) 770-7700
Director, Claude Doak

Special Education Material Distribution System: Focus is on making available special education products and reports which are not marketable according to commercial publishing criteria. The contractor performs loan circulation functions similar to a library. Primary users are teachers and developers. Developers use the system to search for previously developed products or programs. Teachers use this system for initial awareness and initial product evaluation phases of dissemination. In addition, a "Publishers Compact" is made available which includes descriptions of commercially available products. The material distribution center ships directly to users. Parents may also request materials. Most users become aware of materials through Regional Resource Centers.

Main Contractor:
Council of Executives of the American School of the Deaf
(202) 363-1308
Director, Joseph Domich

Sub-Contractor:
Handicapped Learning Materials Distribution Center
Indiana University

NICEM-NIMIS II: The National Information Center for Education Media and the National Instructional Materials Information System are media complements to ERIC. This is a new computerized retrieval system based on the NIMIS and NICEM systems. The focus of the system is to meet media/materials information needs of the special education community on a self-sufficient basis. Catalogs, indexes, microfilms, and search services will be provided to users.

NICEM/NIMIS II
University of Southern California
(213) 741-6681
Director, Tom Risner
Art Schaak (213) 741-5899

Council for Exceptional Children: The Council for Exceptional Children (CEC) is a private association with over 60,000 members. It has a national scope and deals very little with direct technical assistance type services. The dissemination focus of CEC is on providing information to its 60,000 members. Other educators and interested publics are served as well. CEC operates its own "Exceptional Child Education" data base in addition to housing the ERIC Clearinghouse for Handicapped and Gifted. CEC's data base includes over 24,565 entries. In 1977, over 5,400 topical bibliographies were sold; 560 customized computer searches were performed; over 8,500 requests for information were answered. A toll-free number is available for clients seeking information.

Joyce Aegerter
(800) 336-3728

Market Linkage System: Focus is on linking BEH products with commercial publishers. After products and/or programs are produced they are reviewed by BEH for validity and reliability. Then they are reviewed by the market linkage contractor (LINC) for their commercial market potential. The linkage contractor uses a panel of special education teachers and commercial publishing representatives. LINC works with commercial publishers interested in distributing special education materials nationwide. Materials are provided on a competitive bid basis. LINC offers marketing, legal, editorial, and technical services to BEH projects.

LINC Services, Inc.
829 Eastwind Drive
Westerville, Ohio
(614) 890-8200
Director, Victor Fuchs

Dissemination of Personnel Preparation Programs: Focus of this program is on providing dissemination capability for developers of preservice and in-service training programs. The contractor acts as a resource linker for users by providing consumer guides which describe preparation programs. The contractor is also developing a slide/tape presentation on marketing and linking. Staff in personnel training programs are the primary audience for the slide/tape presentation. SEAs may also receive some technical assistance in marketing and linking techniques. One goal of the project is liaison and interaction with all possible users and resources of training information networks and a personalized clearinghouse. Technical assistance is provided along with workshops on dissemination. Services are client-initiated, even though a formal dissemination plan is not required by BEH. Primary motivation for seeking help is desire to see training programs utilized nationwide. There are 51 programs (15 of which are RRCs) which receive assistance from TE/Special Ed East or West. A description of one program (National Support Systems Project) follows.

TE/Special Ed East
203 Yoakum Parkway
Suite 1014
Alexandria, Virginia
Director, Judy Smith

TE/Special Ed West
College of Education
University of New Mexico
Albuquerque, New Mexico

National Support Systems Project: Focus is on providing technical assistance to approximately 80 preservice training programs throughout the country. Dissemination functions include assembly and distribution of project descriptions created by clients, and the creation of bibliographies on specialized subjects. Promising ideas rather than developed programs make up the bulk of information that is disseminated. Materials are also given to CEC for distribution. Audiences include associations and the educational community in addition to the 80 projects. The creation and maintenance of "inter-institutional networks" is a recognized goal.

National Support Systems Project
College of Education
249 Burton Hall
178 Pillsbury Drive, S.E.
University of Minnesota
Minneapolis, Minnesota 55455

Director, Maynard Reynolds
Assistant Director, Karen Lundholm
(612) 373-4854

Handicapped Childrens' Early Education Program: This program is a collection of services. Some services are research oriented, such as the contract research institutes, whereas others are technical assistance oriented. The scope of services also varies.

- Demonstration Centers/Projects. These centers develop and demonstrate exemplary programs for children 0 years - 8 years. They disseminatie curricula and train potential users.
- Contract Research Institutes do basic research and disseminate to fellow researchers.
- State Implementation Grants go to SEAs (approximately 20 SEAs received grants this year) to implement state plans for 0 years - 8 years handicapped children. Dissemination is a major task of the state plans.
- Outreach Programs (to be phased out in 1979) are former Demonstration Centers. They assist agencies in replicating a demonstration model or they stimulate new services. Creating public awareness is also a task of the Outreach Programs. Dissemination is carried out through conferences. Users receive technical assistance at no cost.
- Technical Assistance Centers provide assistance in management, evaluation, planning, dissemination, etc., to all projects except the Outreach programs. There are two T.A. Centers, one on each coast.

BEH Administrator
Dr. Ed Sontag
(202) 245-9722

Child Service Demonstration Centers (CSDC): The focus of the CSDCs is on providing curriculum and staff development services to teachers of learning disabled children. The CSDCs are developing and diffusing these model programs in 33 states and Puerto Rico. CSDCs receive technical assistance from NaLDAP.

BEH Administrator
Dr. Ed Sontag
(202) 245-9722

National Learning Disabilities Assistance Project (NaLDAP): Focus of this program is on providing technical assistance to 53 Child Service Demonstration Centers (CSDC). NaLDAP links the Centers to outside resources.

Manual and computerized information retrieval are provided. A bi-monthly newsletter serves to foster communication among CSDCs as do national and topical workshops and conferences.

NaLDAP
290 South Main Street
Andover, MA 01810
Project Director, D. Max McConkey
(617) 470-1080

Regional Services

There are two programs which are regional in scope. The programs are grouped according to the generalized or specialized nature of their services. Regional Resource Centers provide a wider range of services than Direction Service Centers.

Regional Resource Centers: There are sixteen Regional Resource Centers (RRCs), ten at universities and six at SEAs. The focus of RRCs is to assist SEAs and LEAs to meet new legislative requirements for individualizing education programs for the handicapped. The centers do: capacity building, exemplary program demonstration, program appraisal, information dissemination, implementation, and evaluation. Staff from the centers meet with BEH at least twice a year. RRC staff could be considered linkage agents. The RRC's teach trainers at the state and intermediate levels, they produce special educational products which are disseminated to other RRC's and client states, and they publish newsletters.

Dr. Norman Howe
(202) 472-4650

Direction Service Centers: There are seventeen Direction Service Centers throughout the country. These centers match individual needs of handicapped children to the capabilities of the local system. These centers disseminate information on available services and they provide diagnostic and counseling services. They are housed in a variety of organizations: SEA, University, LEA, ISA, and private.

Dr. Norman Howe
(202) 472-4650

J. Dissemination Capabilities of General Assistance Centers and Certain Other Agencies*

The mission of General Assistance Centers, Types A and B, is to provide specific kinds of service upon request by school district personnel within an assigned geographical region. Examination of the dissemination capabilities of these two types of General Assistance Centers (GACs) shows that a heavy portion of effort is devoted to a variety of dissemination activities, as described below.

GACs, Type A. USOE authorizes seven services: staff training, curriculum development and revision, strengthening community/school relationships, sex desegregation, needs assessment, administrative modifications, and student and staff assignments to overcome racial isolation and to equalize educational opportunity for minority students. These activities are authorized and funded under Title IV of the Civil Rights Act of 1964, as amended, and the Educational Amendments of 1972. Each of the 27 GAC-As serves a state or USOE Service Region. Technical assistance provided by GAC-As is aimed at three general problem areas:

- The design and implementation of effective desegregation plans arising from desegregation litigation in the courts;
- The socialization process that must accompany desegregation; and
- The restructuring of educational institutions and technology required for effective desegregated/integrated education.

The GAC housed at the Far West Laboratory in San Francisco (STRIDE) serves the states of California, Arizona, and Nevada. STRIDE has established relationships with 95 districts in the region serving some 2,100,000 students of whom 920,000 (43%) are minority. Personal contact with each participating district is made by a staff member acting as STRIDE's field representative. Visits, phone calls, and written communications are made as required to meet circumstances.

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* This section was prepared by Wayne Rosenoff.

Other STRIDE dissemination activities included quarterly newsletters to district personnel and other professionals concerned with race and sex desegregation in the region. The mailing list has three separate categories: (a) superintendents of the 95 districts; (b) the 95 district administrators assigned by the superintendent as the liaison person for all information exchange and coordination; and (c) interested others (approximately 1000). Each liaison person receives a supply of newsletters equivalent to one per thousand enrollments. A total of 2000 newsletters is distributed.

In addition, the GAC maintains a resource center to help with information dissemination. Specialized bibliographies, reference compilations, and informational packages are made available to clients, visitors, and conference participants. ERIC searches are ordered occasionally to help staff develop a topic of interest or as required in a service project. On occasion, ERIC articles are retrieved from the Laboratory's collection, copied, and sent out to clients.

A number of products are widely disseminated at the regional conferences (16 were held in the 1977-78 school year) and site visits. They include the following hardcover, print, or media materials:

- Technical Assistance: A Guide for Planning, Delivering, and Evaluating Services to School Districts
- Workshops: Planning and Coordination
- Perspectives on School Print Materials: Ethnic, Non-Sexist
- School Desegregation and Cultural Pluralism
- Four 16mm color films:
  - "School and Community Working Together for Desegregation"
  - "Stereotypes, Learning, and Desegregation"
  - "Aides in Desegregated Classrooms"
  - "Conflict Resolution: A Workshop"

In addition, a large number of information handouts on the various themes and issues of interest to participants are distributed at conferences.

Newsletters and other publications of the other national GAC-As are exchanged on an informal basis, and occasionally items of interest are reproduced for dissemination in the STRIDE newsletter.

GACs, Type B. Also known as Lau Centers, these are funded under Title IV of the 1964 Civil Rights Act and the 1972 Educational Amendments. The mission of Lau Centers is limited quite specifically in the law: to provide technical assistance regarding effective methods of coping with special problems related to English language deficiencies among elementary and secondary non-English dominant minority students. The seven types of service designated for GAC-As also are designated in the legislation for Bs. The Lau Centers are located in all the areas of the nation where large numbers of Spanish-speaking children are enrolled; there are two in California.

Other related agencies with dissemination capabilities:

- California Association of Compensatory Education. This statewide association holds a state-wide conference annually; has numerous activities serving all federally-funded school programs, especially Title 1 and Early Childhood Education. Its statement of mission lists a dissemination objective.
- A network of Migrant Information Education program staff is operating throughout California.
- Sex Desegregation Centers. Some special dissemination activities are funded under Title IX of the 1972 Education Amendments.
- The National Network for Bilingual Education includes 33 regional centers. A National Information Clearinghouse for Bilingual Education is being funded.

Note:

Effective October 1, 1973, the GACs were to be redesignated as DACs (Desegregation Assistance Centers), with 15 DACs for Race and 10 DACs for Sex replacing the GACs, Type A. Nine DACs for National Origin are to replace the GACs, Type B. [Federal Register, July 26, 1978, Part II, p. 32380, subpart A.]

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APPENDIX A

Further Details on National Network for Vocational Education

- National Center for Research in Vocational Education
- Research Coordination Units
- Curriculum Coordination Centers
- State Liaison Representatives

NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION
OHIO STATE UNIVERSITY

General Charter: To conduct a comprehensive program of research, development, and related activities for vocational education.

Authority: Section 105.102 of the 1976 amendments (P.L. 94-482) to the Vocational Education Act of 1963 (P.L. 88-210).

Dissemination/Utilization Functions:

1. Develop and operate a national dissemination/utilization system.
    a. Connect with NIE systems and NDN.
    b. Advise on dissemination/utilization standards.
2. Ascertain needs for special packages of information and products in selected occupational areas, prepare the packages, and disseminate them.
3. Ascertain results of dissemination efforts and assess impact of R&D information.
4. Train 56 Resource Coordinating Units and six Regional Curriculum Coordinating Centers in dissemination.
5. Through secondary analysis of existing data, ascertain national needs for new curriculum and personnel.
6. Ascertain priorities for the conversion of Department of Defense materials and for making them available to civilian vocational educators.
7. Develop and maintain an improved storage, retrieval, and distribution system for information about instructional and research materials. (Conversion and elaboration of AIM/ARM.)
8. Maintain close liaison and cooperation with ERIC and other information systems.* Supply vocational education materials to those systems.
9. Disseminate information about the location and availability of various instructional media.
10. Maintain catalogue of all research, demonstration, and curriculum development projects funded under VEA, 1970-77, and prepare annual summary report.

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*Smithsonian Science Information Exchange, Intergovernmental Research Information Service, Adult Education and Lifelong Learning System, National Technical Information System.

RESEARCH COORDINATION UNITS

1 in each of 50 states	50
1 in the District of Columbia	1
1 in each of 5 U.S. territorial possessions	5
TOTAL	56

General Charter: To manage all federally funded R&D in vocational education within the state, district, or territory.

Authority: Vocational Education Act of 1963 (P.L. 88-210) and all subsequent amendments, including 1976 (P.L. 94-482). Dissemination role defined in 1967.

Dissemination/Utilization Functions:

1. Assure dissemination of information about federally funded research, demonstration, and curriculum development within the state, district, or territory.
2. Forward information about federally funded research, demonstration, and curriculum development to ERIC/CICE and AIM/ARM (or its successor).

Between-State Variations:

1. Fifty-two RCUs are officially a part of the State Department of Education. The other four are at a university or community college.
2. In 29 cases, the RCU Director and the Part D Project Officer (Exemplary Demonstration Projects) are one and the same person. In the other 27 cases they are separate.
3. Some RCUs simply administer VEA funds. Others offer a wide variety of services intended to stimulate,coordinate, and support R&D, as well as disseminate results.
4. Some RCUs are well defined and highly centralized. Others are a set of functions dispersed through a bureaucratic maze.
5. Some RCUs contract the work to other agencies; others do it themselves.

CURRICULUM COORDINATION CENTERS

EAST CENTRAL, SPRINGFIELD, ILLINOIS
WESTERN, HONOLULU, HAWAII
MIDWEST, STILLWATER, OKLAHOMA
NORTHEAST, TRENTON, NEW JERSEY
NORTHWESTERN, OLYMPIA, WASHINGTON
SOUTHEAST, MISSISSIPPI STATE, MISSISSIPPI

General Charter: To improve vocational curriculum development.

Authority: Section 104.708 of the 1976 amendments to the 1963 VEA. (Originally authorized in 1968; funded since 1972.)

Dissemination/Utilization Functions:

1. Ascertain needs and set priorities for development of new curriculum within their respective multistate regions.
2. Exchange information among states within their regions and between regions to avoid undesired duplication.
3. Forward information about federally-funded curriculum development to ERIC/CE and ARM/AIM (or its successor).

STATE LIAISON REPRESENTATIVES

1 in each of 56 states, district, and territories. TOTAL: 56

General Charter: To link their respective state, district, or territory to the Regional Curriculum Coordination Centers and to coordinate federally funded curriculum-development projects.

Authority: Same as Regional Curriculum Coordination Centers.

Dissemination/Utilization Functions:

1. Ascertain needs and recommend priorities for development of new curriculum. Forward such information to Regional Curriculum Coordination Center.
2. Exchange information with other states.
3. Forward curriculum-development information to ERIC/CE and AIM/ARM through Regional CC Center.
4. Disseminate curriculum-development information within state.

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